UNIVERSITY OF PENNSYLVANIA

A STUDY OF SOURCES OF REVENUE FOR PUBLIC EDUCATION IN NEW JERSEY

SIMON MOTTER HORSTICK

A THESIS

IN EDUCATION

PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

PHILADELPHIA

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SIMON MOTTER HORSTICK.

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I

The Problem

1. *Introduction*

Taxation in some form is probably as old as the record of man. It appeared in primitive society as a voluntary contribution of the subordinate individual to the political power in control at the time. Later, as civilization advanced, it became a compulsory tribute exacted by the ruling classes for the purpose of promoting national defense or for furthering aggressive movements against neighboring nations. In modern nations taxation is utilized not only for defense but also for regulative functions and for those activities that are intended for the promotion of the general welfare.

One of the most important of such activities in which the government of our country engages is that of education. This activity is relegated largely to the states of the union, for the Federal Government takes but a comparatively small part in providing funds for educational purposes.

The principle of levying taxes upon the public for the support of education is of recent origin, having been scarcely discussed a century ago. In the early history of public education it was vigorously opposed by many citizens on the ground that it was unjust to tax a citizen, who had no children, for the education of his neighbor's children. Gradually, however, the idea of supporting education by public taxation became established, so that now it has been accepted by all the states of this country.

The principle that is now being urged for wider acceptance is that, "All the wealth of the state should, in justice, be taxed to pay a part of the expense of educating all the children of the state."[1] This principle implies that all the children in the state should have equivalent educational opportunities and that the expense should be borne by all the wealth of the State which should be taxed in an equitable way.

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[1] Keith, John A. H. and Bagley, William C., *The Nation and the Schools*, p. 246.

The present system of taxation in the State of New Jersey does not take into consideration the newer forms of wealth that our modern economic system has created, but depends almost entirely upon the general property tax. The increasing financial requirements for the public activities of the State place an undue strain upon the already overburdened general property tax. For the purpose of relieving the strain on the present system of taxation or for the purpose of suggesting new sources of revenue, various state officials have called attention to the state of affairs and suggested remedies.

In an Associated Press dispatch the State Board of Taxes and Assessments stated: "that high tax rates prevailing in the 21 counties of the State were largely due to inequalities in the assessments throughout the local taxing districts. In an effort to effect further equalization of valuation the board had sought to bring to the attention of county tax boards the factors which go to make up the differences in tax rates in the State.

"A table accompanying the statement showed that the average rate of taxation in municipalities of New Jersey for 1930 was $4.055. This table also carried a summary of tax rates in the 559 districts. There were 230 districts in which the rates were between $4 and $5 and 121 districts with rates between $5 and $6. A district in Burlington County was the only one with a rate between $1 and $2. A rate of between $8 and $9 in three districts was cited in contrast to the low rate. These districts were situated in Union, Burlington and Warren Counties. There were 32 districts w'th rates of between $2 and $3 and 121 districts between $3 and $4. Forty-three have rates lying between $6 and $7, while eight have rates between $7 and $8."[2]

In the report of the Commission to Investigate the Subject of the Distribution of State School Moneys the recommendation is made for a graduated State income tax of rates varying from one-half of one per cent to three per cent to be levied for the sake of providing additional funds for the support of the public schools.[3]

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[2] Associated Press Dispatch released in Trenton, N. J., April 30, 1930.

[3] Commission to Investigate the Subject of the Distribution of State School Moneys, *Report of 1923*, pp. 10–25.

Dr. Charles H. Elliott, Commissioner of Education for New Jersey, in an interview with a representative of the Press pointed out the need of increased revenue for public school purposes and advocated a sales and luxury tax.[4]

These references indicate that, in the opinion of the authorities quoted above, the present system of taxation by which the revenues of the State are provided, is inadequate and inequitable. It is inadequate in that the revenue is not sufficient for the needs, and inequitable in that the varying rates of the assessment of general property cause injustice in the levying of this tax between communities, and further, in that the present system does not include all available sources that might produce revenue for State purposes.

On the other hand, the cost of public education in New Jersey has been constantly increasing. As may be seen in Table I,

TABLE I

COMPARISON OF TOTAL STATE AID AND TOTAL COUNTY AND DISTRICT SCHOOL RECEIPTS, EXCLUSIVE OF PREVIOUS YEARS' BALANCE AND RECEIPTS FROM THE SALE OF BONDS, FROM 1913-1914 TO AND INCLUDING 1927–1928.[5]

YEAR	TOTAL STATE AID	TOTAL COUNTY AND DISTRICT RECEIPTS	PER CENT TOTAL STATE AID IS OF TOTAL RECEIPTS
1913–14	$9,766,263.47	$20,808,990.94	46.9
1914–15	9,965,147.43	22,314,155.79	44.7
1915–16	10,040,174.06	23,715,749.37	42.3
1916–17	10,878,589.71	26,108,149.17	41.7
1917–18	11,046,575.01	27,861,457.33	39.6
1918–19	11,841,713.12	33,116,428.31	35.8
1919–20	12,076,709.13	37,701,518.15	32.0
1920–21	12,522,664.90	50,734,625.49	24.7
1921–22	22,893,344.81	57,254,851.40	22.5
1922–23	14,663,500.66	66,010,520.38	22.2
1923–24	14,514,902.64	67,589,781.28	21.5
1924–25	15,604,293.31	75,166,444.89	20.8
1925–26	16,060,433.31	80,634,717.66	19.9
1926–27	16,643,051.71	86,513,789.03	19.2
1927–28	18,053,703.17	91,167,185.98	19.8

[4] Elliott, Charles H., Commissioner of Education for New Jersey, in an Associated Press Dispatch released in Trenton, N. J., June 26, 1930.

[5] Morse, Herbert N. and Anderson, Charles D., *Report of State Federation of District Boards of Education, 1926–27*, p. 113.

the total county and district school receipts, exclusive of previous years' balance and receipts from the sale of bonds, advanced from $20,808,990.94 in 1913 to $91,167,185.98 in 1927–1928 and the total state aid advanced from $9,766,263.47 in 1913–14 to $18,053,703.17 in 1927–28. State aid during this period was not quite doubled while total school costs increased four and one-half times.

While the state aid has been increasing, the ratio of state aid to total school costs has decreased from 46.9 per cent in 1913–14 to 19.8 in 1927–28. The increases in total school costs were caused by the "development and expansion in the work of the schools in accordance with new social and cultural needs, and with the aspirations and further demands of the people. More of the children attend school and for a greater number of years due to changes in compulsory education laws and in child labor regulations. These facts and the decrease in the purchasing power of the dollar are reflected in the increased school costs."[6]

There are two ways to meet the present situation, either to decrease the costs or to find new sources of revenue. To decrease the costs would mean to lower the efficiency of the schools. This step would, however, not be in accord with the ideals of the public. But to continue to meet the increasing costs by the present system of taxation would place added burdens upon the already overburdened general property tax, which is now carrying nearly the whole load. Apparently the only practical recourse is to find new sources of revenue so that the public schools may continue to advance and fulfill the functions that the people of New Jersey expect of them.

2. *The Problem*

So the problem in this thesis is to investigate public school finance in the State of New Jersey for the purpose of suggesting other sources of taxation for the support of public schools in the several counties of the State. This investigation will involve a consideration of the relationship existing between "wealth", as

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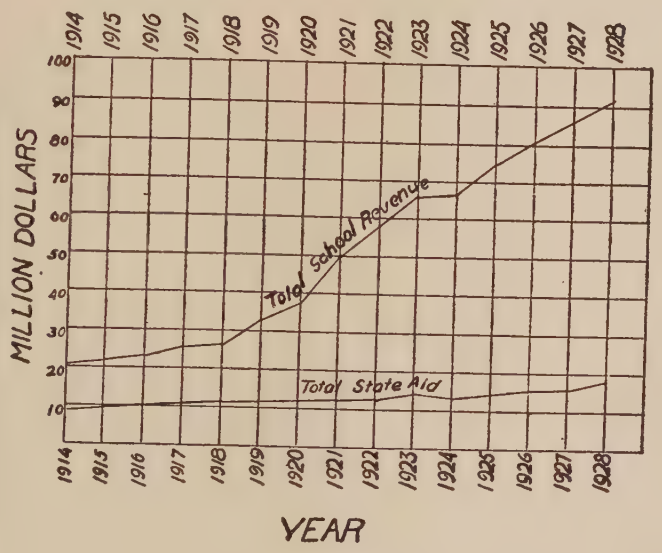
[6] Commission to Survey Public Education, Trenton, N. J., *Report of January, 1930*, p. 176.

CHART I

Comparison between Total School Revenue and Total State Aid for the Year 1914 to and including 1928
See Table I



measured by certain economic factors, "duty",[7] as expressed by the number of pupils in the public schools, and "effort", as shown by funds raised in support of public education.

There are three steps in this study:

1. To develop a method for ascertaining the relative efforts of the several counties of New Jersey in supporting public education, when economic resources, number of pupils, and school revenues are compared.
2. To analyze the financial condition with respect to provision of funds in the counties of New Jersey in order to show what the results would be if the suggested economic factors were considered in taxation for public school purposes.
3. To ascertain whether or not the results secured would provide a better basis of taxation for public school purposes.

3. *Sources of Data*

The county was selected as the unit for study, for it is the smallest unit for which the economic data were available, and because the statistical information concerning schools, which is published by the Commissioner of Education, is given in terms of the county.

The data concerning assessed valuations and the relationship between assessed valuations and value as indicated by actual sales prices were secured from published and unpublished reports of the New Jersey State Board of Taxes and Assessments.[8]

The estimate of income for the counties was secured from the Crowell Publishing Company.[9] This firm obtained estimates of the income of all the states from the National Bureau of Economic Research[10] and distributed these according to the formulae developed by Weaver in "The Development of a Basic Purchasing Power Index by Counties."[11]

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[7] The term duty was adopted in this connection rather than the term need, for the latter term is frequently used to designate the difference between the sum that a community can raise for school support and the cost of the minimum educational requirements.

[8] Access to the unpublished reports was granted by Mr. C. E. Cook, Secretary of the State Board of Taxes and Assessment.

[9] The Crowell Publishing Co., 250 Park Avenue, New York City.

[10] National Bureau of Economic Research, 474 West 24th Street, New York City.

[11] Weaver, H. G., General Motors Corporation, Detroit, Michigan.

Bank Resources were compiled from Rand-McNally's Bankers Directory.[12] Building and Loan Assets were taken from the report of the Commissioner of Banking and Insurance of New Jersey for 1928.

Value of Products was compiled from the Federal Reports on Manufacturing, Agriculture, Mining and Fisheries issued by the several bureaus concerned with these activities.

The data concerning school pupils and school expenditures were secured from the State Department of Education of New Jersey through the kindness of Mr. Herbert N. Morse, Assistant Commissioner of Education and Mr. Charles D. Anderson, Chief Statistician, as these figures were not published at the time.

The other sources of the data will be fully identified at the proper places in the body of the study when they are used and their limitations will be indicated.

4. *Previous Studies-Bases for Estimating Wealth*

In many of the studies made in school finance, general property valuation or some derivative, usually termed true value, has been used as a measure of the ability of a state or subdivision of a state to support public education. Mort says, "We need only to obtain the value of taxable property to have a measure of the relative ability of a locality to pay local taxes for supporting schools."[13] Updegraff and King say, "The ability of a school district to support schools depends upon the amount of taxable wealth it has." Taxable wealth here evidently refers to general property, for later, on the same page is found the statement that "This can be done by ascertaining the amount of property taxable for schools back of each teacher employed... Different districts assess property at different rates of assessment."[14]

The Maryland Survey asserts that, "A county's ability to support schools is best indicated by the amount of taxable

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[12] Source approved by Mr. F. W. Simmonds, Deputy Manager, American Bankers Association.

[13] Mort, Paul R., *State Support for Public Schools*, p. 17.

[14] Updegraff, Harlan and King, Leroy A., *Survey of the Fiscal Policies of the State of Pennsylvania in the Field of Education*, p. 42.

wealth back of each child."[15] The term wealth as used here refers to general property, for on page 148 of the same report the statement is made that, "The difference. . . was raised by the counties and the city of Baltimore by taxes levied on all property."[16] And later on, "The moral is plain: the state cannot afford to dispense its school funds without requiring a minimum school levy on the part of the several counties. Even so, the situation will continue to be more or less chaotic, unless and until property is assessed upon an equitable and uniform basis. For no absolutely fair distribution of the state fund can be made unless the minimum rate upon which the state should insist is levied upon an assessed valuation that really means the same thing in every county."[17]

Several exceptions to the above may be noted. Norton made use of an "Index of Economic Resources" to measure the financial ability to support schools.[18] This index of economic resources is made by using one-tenth of the estimated wealth plus the current income. He feels that some combination of the two measures would result in a more reliable index than either of the two alone. Wealth in his treatise refers to "the material wealth or value of tangible property located within the limits of continental United States. . . . The total wealth of the nation is apportioned among the states so that the estimate for a given state measures, to such a degree of exactness as could be attained, the value of properties within the state."[19]

King made use of this "Index of Economic Resources" in his study of the ability of Pennsylvania to support education.[20]

Morrison in his study of North Carolina used income tax paid to the State plus one per cent of the equalized assessed property

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[15] General Education Board, New York, *Public Education in Maryland*, p. 151.
[16] *Ibid.*, p. 148.
[17] *Ibid.*, p. 154.
[18] Norton, John K., *The Ability of the States to Support Education*, p. 17. Published by the National Education Association.
[19] *Ibid.*, p. 3.
[20] King, Leroy A., *Factual Data Relating to the Ability of Pennsylvania to Support Education*, p. 2.

value as a measure of the economic ability of the counties to support education in North Carolina.[21]

These are refinements that introduce income as a factor in measuring wealth. This is an advancement for it brings to the public consciousness the possibility of relief to the overburdened general property tax.

5. *Procedure*

The procedure followed in this study is largely statistical for the material is of such a character that it is more readily presented in this manner. The particular statistical method was selected as the result of studying Irving Fisher's "The Making of Index Numbers" and H. C. Weaver's "The Development of a Basis Purchasing Power Index by Counties."

The three steps in this study have been previously mentioned. (See page 18.) In the first step, factual data available by counties in regard to wealth, pupil population and taxes for public school purposes were collected. Each set of data was compiled by counties. The State total for each set was taken as the base and the relationship between the county and the State was expressed in terms of percentage.

From the material which was collected, a selection was made on the basis of four criteria: availability, applicability, validity and reliability. All the material used in this study may readily be procured from the sources indicated. Some material that may be desirable is not available by counties. Only such material as was applicable to this study was selected. As to the validity of the sources, there may be some criticism, but these data have been presented in the belief that they were the best that could be procured under the existing conditions. Some criticisms and limitations have been discussed later.

In the case of wealth, five different factors, each indicating some form of wealth, were selected on the basis of the criteria above mentioned. The relationship between the county and the State in respect to each of these factors was determined and

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[21] Morrison, Fred Wilson, *Equalization of the Financial Burden of Education Among the Counties of North Carolina*, p. 47.

expressed in terms of percentages of the State total. Then the geometric average of the percentages of the several counties was taken to express the relationship existing between the county and the State in the matter of wealth.

In considering duty, only one factor of pupil population—average daily attendance—was used.[22] Other factors were tested but the results showed such slight variations that any of the different factors might be used without affecting the results. The percentages for average daily attendance were found as explained above in the case of wealth.

The whole amount of money that every county raised by taxation, both by local school taxes and by the State school tax, was taken to express the effort that every county made in support of public education. Some counties did not receive from the State school tax all the money that they contributed, while other counties received more than they contributed. The amount of money that was actually spent for education is dealt with later in this study, but at this point only the amount raised by taxation was used to express the effort that the county made. The percentages were found as previously explained.

The geometric averages for economic resources or wealth were then compared with the percentages for pupils or duty, and the resulting set of ratios was named Ratio A. Similarly, the percentages for school taxes or effort were compared with duty to form Ratio B. Ratio A was then compared with Ratio B to form the resulting index numbers, which represented the comparative effort that the several counties made when wealth and duty were considered.

In the second step the cost per pupil for every county was estimated by taking the total of all school expenditures for the county in 1928, less tuitions received, and dividing the remainder by the average daily attendance in that county during the above year. The cost per pupil[23] was used as the base for comparison of the results secured by using each of the economic factors for taxation purposes. The sum of the expenditures of all the coun-

[22] The definition of attendance and average daily attendance as given in the New Jersey School Register will be found in the Appendix, p. 128

[23] Hereafter the term "cost per pupil" will be understood to mean the cost per pupil in average daily attendance at the public schools of the State.

ties was then taken as the total educational burden to be raised by using the several economic factors as bases of taxation. The total educational burden amounting to $110,930,000 for 1928 was apportioned to the several counties according to the percentage that the county had of the economic factor under consideration. Every county's apportionment was then reduced to the per pupil basis. These per pupil bases were then compared with the cost per pupil in order to determine, if possible, which of the economic factors would come nearest to supplying the needs of the schools.

None of the economic factors was found to be of sufficient strength to bear all the taxation alone, so the plan was evolved to tax them all under three classes, namely; property, income, and business. If bank resources, building and loan assets, and value of products were combined they would constitute a fair representation of the business interests of the State, and a tax upon them collectively would be a business tax. So the basis of the suggested plan of taxation for school purposes in New Jersey includes (a) true value of tangible property, (b) personal income, and (c) business.

6. *Criteria*

In the third step the attempt was made to show that the suggested plan of taxation would conform closely to the following criteria, which were presented by the National Education Association as a measure of an acceptable state tax system:

"It is easy to say that taxation should be equitable and efficient. But equity and efficiency are nearly as difficult to define as to attain. Still, students of taxation have, over a long period of time, evolved certain general laws or standards of efficiency which constitute a basis for judging a state tax system. Some of these are:

"Adequacy. The tax system should produce sufficient revenues to meet all the legitimate needs of the state.

"Economy. Taxes should involve a low percentage of overhead cost for their collection.

"Convenience. Installments, places, and dates for payment should be arranged to meet the convenience of the public.

"Certainty. The revenue of a state should be stable and dependable.

"Adaptability. The tax system should be susceptible of ready modification in time of need.

"Diversity. Taxes should tap more than one source.

"Conformity. The tax system should be unified and in accord with the political ideals of the time.

"Conservation. The tax system should discourage squandering of the patrimony of the state."[24]

The suggested plan of taxation that has been developed in this study will be found to correspond closely to the above criteria.

This plan of taxation is compared also with the "Model System of State and Local Taxation" presented by the National Tax Association and is found to depend upon the same principles and to conform to the requirements of its plan.[25]

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[24] National Education Association, Research Division, *Studies in State Educational Administration*, Study No. 2, January, 1930, p. 2.

[25] National Tax Association, *Report for 1919*, pp. 426–469.

II

Wealth, Duty and Effort

1. *Economic Resources of the State by Counties*

The object of this portion of the study is to determine as fully as possible the relationship existing between "wealth", "duty," and "effort" in the different counties of New Jersey in the year 1928.

As previously explained, "wealth" of the counties refers to the economic resources as fully as these resources may be determined by the economic factors that were selected to represent it. Of course it is impossible to determine the absolute wealth of any community, so the method of expressing the wealth of the counties as percentages of the total wealth of the State was adopted. The combination of these percentages for every county should give a closer approximation to the true condition of the counties than any single factor would give.

In the effort to point out the resources of the counties, a number of data, indicating the wealth of the communities, were assembled and considered. Material that was not procurable by counties was rejected, for this is particularly a study of the economic resources of the counties. Certain types of data were not used for they were included in some of the largest groupings. For instance, the value of farm buildings and of residences were included in assessed valuations. Some data did not apply to the matter in question. They might have value in other situations and for other purposes but were not pertinent here.

So the choice was narrowed down to five factors:

1. Assessed Valuation from which a True Value was estimated
2. Income
3. Bank Resources
4. Building and Loan Assets
5. Value of Products of Manufacturing, Agriculture, Mining and Fisheries.

2. *Assessed Valuations in General*

The terms assessed valuation and general property are used interchangeably. They both refer to two kinds of property, real

property and personal property. Real property consists of land and the buildings and improvements upon it. Such property is readily discoverable by the assessor and can be valued for purposes of taxation.

But the assessment of personal property is an entirely different matter. In the original concept the term personal property referred to such possessions as live stock, farm implements, household goods, tools of the various trades, merchandise, money, jewels and similar articles that could be easily moved. Such property was quite well known to the assessors and could be valued accordingly. But the later commercial and industrial developments brought into existence new forms of wealth. Much of the property termed "personal" is incorporeal and invisible, easy of transfer and concealment, not admitting of valuation by comparison with any common standard, and the situs or locality of which, for purposes of assessment is involved in many questions of law. Of such a character are all negotiable instruments, *i.e.*, national, state, municipal, and corporate bonds; written obligations of indebtedness on the part of individuals; book accounts, annuities, money at interest, cash on hand, and the like, the whole constituting by far the largest proportion of the so-called personal property.

Although the above forms of personal property can not be reached by the present methods of assessment in New Jersey, they form an important portion of the wealth of any community. Bullock states that, "Personal property has increased relatively more rapidly than real property, until now it is regarded as its equal in value in most of our American commonwealths."[1] In New Jersey in 1928 the total assessed valuation was $6,196,866,074, and only $701,439,032 of this amount was assessed as personal property. Personal property was 11.32 per cent of the total assessed valuation while real property was 88.68 per cent.

3. *Method of Assessment in New Jersey*

Assessments of real and personal property are made in New Jersey by the local assessors. Their returns are passed upon by

[1] Bullock, Charles J., *Selected Readings in Public Finance*, p. 212.

the County Board of Taxation. The returns of the County Boards are passed upon by the State Board of Taxes and Assessment.

"It is the duty of the County Boards of Taxation upon the completion of the assessors' books, to ascertain the ratio or percentage of true value at which real property in their counties is assessed, and to prepare a table showing the assessed value of real property, the percentage of increase or decrease necessary to attain true value, and the true value of the property as determined by them. After giving a hearing to assessors and representatives of taxing districts, the county tables are revised or confirmed by the County Boards in accordance with the facts, and copies filed with the State Board. The equalized valuations are deemed to be the true valuations in all apportionments of State and County taxes.

"Subsequent to the receipt of the abstracts of ratables[2] from the County Boards, the State Board prepares a State table of county ratables, showing the assessed value of both real and personal property in the various counties, the percentage by which the real property should be increased or decreased to correspond to true value and its true value as determined by the Board—A certified copy of the State Table is transmitted to the State Comptroller to become the basis of apportionment of all State taxes and State moneys."[3]

The purpose of these reviews of the work of the local and county officials is to secure equalization of assessments in every county and local taxing district, so that every district will be compelled to bear its just share of State and County taxes.

4. *The State Board of Taxes and Assessmen*

In addition to its other duties, the State Board of Taxes and Assessment is required by law to determine the relationship existing between assessed valuations and actual sales values in every county. All real and personal property in the State of New Jersey is supposed to be assessed at its true value. This is provided for in Section 202 of the General Tax Act, Revision of 1918, in these words:

"All property, real and personal, within the jurisdiction of this State, not expressly exempted by this act or excluded from its operation, shall be subject

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[2] The abstract of ratables is the assessment list showing the name of every property owner, the size, character and assessed valuation of the property and other details necessary for levying the general property tax.

[3] State Board of Taxes and Assessment, *Report of 1928*, pp. 9–10.

to taxation annually under this act at its true value, and shall be valued by the assessors of the respective taxing districts."[4]

But the State Board of Taxes and Assessment finds through its investigations, that this part of the law has not been complied with. In its reports it gives the results of its investigations during the past five years. These investigations disclosed that an apparent relationship of assessed valuation to true value ranging from 35 per cent to 60.3 per cent exists in the twenty-one counties, when the same test had been impartially applied to all.[5]

In order to obtain the above results the Board sent its field staff into the several counties to examine the legal documents used in the transfer or the mortgage of property, with the object of determining the relationship between assessed valuation and true value. When the actual sale price of property was found, or the approximate true value determined by computing the revenue stamps attached to such documents, the assessed valuation of the piece of property was found. By this method the investigators examined the records of 36,115 transfers of property, of an actual sales value of $462,002,555 and an assessed valuation of $239,647,337. They determined that the assessed valuation was approximately 52 per cent of the actual sales price or true value for the State.

The Board of Taxes and Assessment admits some criticism of the method employed, for they say:

"It has been contended that many of our sales prices were taken at a time of unusual activity and inflation, and that subsequent price recessions made their value of questionable worth for purposes of comparison. This can best be answered by stating that, granting such to be true, it yet remains a fact that since assessments are made yearly they may readily be adjusted either up or down to the conditions prevailing in the realty market from year to year, rather than by the opinion of the taxing officials that all those buying and selling are paying and receiving exorbitant or inflated prices in their transactions."[6]

There is, however, no assurance that the investigations covered all types of property. If the investigators went into a

[4] *Tax Laws of the State of New Jersey*, 1926 Edition, p. 2.
[5] State Board of Taxes and Assessment, *Report of 1928*, p. 11.
[6] *Ibid.*

county during a year in which there were no transfers of large industrial plants or few farm properties, but much activity in the sale of small dwellings, their findings might be biased to a considerable degree. Further, the investigations concerned real estate only and did not take into consideration personal property which in 1928 constituted 11.32 per cent of the total assessments.[7]

Notwithstanding the criticisms, this investigation is undoubtedly the best that has been done in New Jersey and is probably superior to any work that could be done by a private investigator. For this reason the work of the State Board of Taxes and Assessment has been accepted and the results are shown in Table II, page 30. This table shows the year in which the State Board made the investigation, the number of legal documents that were examined, the actual sale price, the assessed valuation of the property and the percentage that assessed valuation is of true value, for every county of the State. By this table it will be seen that Middlesex County had the lowest ratio, which was 35 per cent, and Bergen with 36 per cent was the next. Thirteen counties range from 40 per cent to 50 per cent while four were between 50 per cent and 60 per cent and two counties, Atlantic and Hudson had ratios of 60 per cent and 60.3 per cent respectively.

5. *Assessed Valuations in New Jersey*

The assessed valuations in New Jersey for the years 1925–1929 are shown in Table III, page 31. This table is presented in order to show the steady increase that has taken place in that time. The largest increase was in 1926 and was probably due to the great activity in real estate. While real estate has shown a steady increase, personalty,[8] on the other hand showed a considerable decrease, due largely to the removal of automobiles from personal property taxation under Section 17 of Chapter 338, P.L. 1927.[9] But on the whole, assessments throughout the State have shown a steady increase. How long such an

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[7] *Ibid.*, Computed from Tables on p. 143 and p. 144.

[8] Personalty is a term used to mean personal property. Compare with realty used instead of real estate.

[9] State Board of Taxes and Assessment, *Report of 1928*, pp. 3–5.

upward trend can be maintained is problematical, but the indications are that a change will soon set in.

The average of the assessments for the years 1925–1929 for every county was computed from Table III, page 31, and by applying the ratios found by the State Board, the true value for the averaged assessments was estimated for every county. The total for the estimated true values was then found and every

TABLE II

RESULTS OF INVESTIGATIONS BY REPRESENTATIVES OF THE STATE BOARD OF TAXES AND ASSESSMENT, SHOWING THE YEAR OF THE INVESTIGATION, THE NUMBER OF LEGAL DOCUMENTS EXAMINED, THE ACTUAL SALE PRICE, THE ASSESSED VALUATION, AND THE PER CENT THAT THE ASSESSED VALUATION WAS OF THE SALE PRICE[10]

	YEAR	NUMBER OF LEGAL DOCUMENTS EXAMINED	ACTUAL SALE PRICE	ASSESSED VALUATION	PER CENT OF SALE PRICE
Atlantic	1928	1648	$43,292,364	$26,087,683	60
Bergen	1926	2173	21,939,806	7,934,064	36
Burlington	1928	2005	11,428,975	4,586,128	40
Camden	1926	1815	20,500,058	8,372,962	40.8
Cape May	1928	1227	14,901,479	6,252,684	41.9
Cumberland	1928	1131	6,734,870	2,926,353	44
Essex	1927	3955	86,909,087	49,437,565	56
Gloucester	1924	846	4,221,682	2,051,125	48.6
Hudson	1928	4796	91,692,884	55,309,675	60.3
Hunterdon	1925	743	3,445,212	1,565,570	45.44
Mercer	1927	1017	11,809,297	6,438,892	55
Middlesex	1928	1723	21,264,497	7,523,013	35
Monmouth	1925	2884	20,333,768	8,712,647	43
Morris	1928	1023	10,753,767	4,399,675	40.9
Ocean	1924	694	4,889,521	2,183,337	44.65
Passaic	1928	3918	47,965,876	26,691,510	56
Salem	1928	864	2,972,060	1,582,624	53.2
Somerset	1927	871	7,482,644	3,340,172	45
Sussex	1925	559	2,900,490	1,377,785	47.5
Union	1927	1451	22,430,929	10,915,396	48.6
Warren	1924	772	4,133,289	1,958,477	47.3

Read: The New Jersey State Board of Taxes and Assessment investigated Atlantic County in 1928. They examined 1648 legal documents of a total sale value of $43,292,364. The assessed valuation was found to be $26,987,683. Assessed valuation was 60 per cent of sales value.

[10] From unpublished reports of the above Board.

county's percentage of the total was estimated. These results are shown in Table IV, page 32.

6. *True Value*

The assessed valuations for 1928 were then taken and treated as described above. The estimated true value and the percentage of the State total for every county were found. The results of these computations are shown in Table V, page 33. A comparison of Table IV, page 32, with Table V, page 33, reveals that the estimated true value of every county, based on the averaged assessed valuations for the years 1925–1929 is very close to the

TABLE III

NET VALUATIONS ON WHICH COUNTY, STATE, AND STATE SCHOOL TAXES WERE APPORTIONED IN THE STATE OF NEW JERSEY DURING THE YEARS 1925–1929, INCLUSIVE[11]

(In Thousands)

	1925	1926	1927	1928	1929
Atlantic	$275,246	$395,814	$415,857	$427,725	$432,282
Bergen	301,485	338,927	378,283	419,620	448,511
Burlington	59,761	64,051	67,718	68,254	69,825
Camden	263,396	307,406	322,282	334,695	351,208
Cape May	65,340	90,413	94,311	99,408	102,354
Cumberland	48,871	50,518	51,884	51,230	52,576
Essex	1,127,917	1,310,592	1,422,199	1,493,469	1,590,529
Gloucester	57,824	64,269	66,774	66,934	67,645
Hudson	1,024,187	1,158,310	1,202,232	1,208,429	1,250,129
Hunterdon	26,053	26,487	26,792	29,164	29,132
Mercer	240,788	275,818	281,259	290,174	293,033
Middlesex	161,196	172,483	182,456	192,854	205,583
Monmouth	186,414	199,523	207,368	218,959	231,124
Morris	76,078	91,527	97,679	103,981	109,270
Ocean	34,176	38,183	43,195	46,357	49,773
Passaic	361,231	381,411	402,622	533,907	469,495
Salem	33,431	33,914	33,481	33,620	34,287
Somerset	52,532	59,107	61,127	63,188	66,206
Sussex	29,791	31,303	32,207	32,227	32,972
Union	335,062	373,643	405,440	437,678	463,240
Warren	39,990	42,523	44,390	44,983	45,907
State	4,800,779	5,506,233	5,839,568	6,196,866	6,395,091

Read: During the year 1925 the assessed valuation in Atlantic County was $257,246,000, etc.

[11] New Jersey State Board of Taxes and Assessment, *Reports for 1925–1929.*

estimated true values for 1928. The greatest variation is in Passaic County, where the difference is 1.02 per cent. The next county in point of variation is Hudson, which shows a difference of .69 per cent. The remaining counties show a very close relationship between the two estimates, in some cases varying by only one-hundredth of one per cent. So the true value based upon the 1928 assessments will be accepted in this study.

TABLE IV

AVERAGE OF THE ASSESSED VALUATIONS FOR THE FIVE YEARS 1925–1929, PER CENT THAT ASSESSED VALUATION WAS OF SALE PRICE, ESTIMATED TRUE VALUE OF THE COUNTY'S TAXABLE PROPERTY AND THE PERCENTAGE THAT EVERY COUNTY HAD OF THE STATE TOTAL[12]

(In Thousands)

	AVERAGE OF ASSESSED VALUES 1925–1929	PER CENT OF TRUE VALUE	ESTIMATED TRUE VALUE	COUNTY'S PERCENTAGE OF STATE TOTAL
Atlantic	$389,384	60	$648,973	5.71
Bergen	377,365	36	1,048,236	9.22
Burlington	65,921	40	164,802	1.45
Camden	315,797	40.8	774,012	6.80
Cape May	90,365	41.9	215,668	1.90
Cumberland	51,015	44	115,943	1.02
Essex	1,388,941	56	2,480,252	21.81
Gloucester	64,689	48.6	133,105	1.17
Hudson	1,168,657	60.3	1,938,071	17.04
Hunterdon	27,525	45.44	60,574	.53
Mercer	276,214	55	502,207	4.42
Middlesex	182,914	35	522,611	4.60
Monmouth	208,677	43	485,295	4.27
Morris	95,707	40.9	234,002	2.06
Ocean	42,336	44.65	94,817	.83
Passaic	429,733	56	767,380	6.75
Salem	33,746	53.2	63,432	.56
Somerset	60,432	45	134,293	1.18
Sussex	31,700	47.5	66,737	.59
Union	403,012	48.6	829,243	7.29
Warren	43,558	47.3	92,089	.80
State	5,747,688	100.00	11,371,742	100.00

Read: Atlantic County's average of the assessments for the years 1925–1929 is $389,384. Assessed Value is 60 per cent of True Value. So the True Value on the basis of the average assessed value would be $648,973, which is 5.71 per cent of the total estimated True Value of the State.

[12] Compiled from Table I and Table II.

7. *True Value per Pupil*

The estimated true value was then considered as it applied to the public school situation. The true value of every county was divided by that county's average daily attendance as reported by the State Department of Education. The results are shown in Table VI, page 34. The true value per pupil ranges from $43,838 in Cape May County to $9,086 in Salem County. Bergen

TABLE V

NET VALUATION ON WHICH COUNTY, STATE AND STATE SCHOOL TAXES WERE APPORTIONED FOR THE YEAR 1928, THE PER CENT THAT ASSESSED VALUATION WAS OF TRUE VALUE, ESTIMATED TRUE VALUE, AND THE PERCENTAGE THAT EVERY COUNTY HAD OF THE STATE TOTAL.[13] (IN THOUSANDS)

	NET VALUATION 1928	PERCENTAGE THAT ASSESSED VALUATION WAS OF TRUE VALUE	ESTIMATED TRUE VALUE	PERCENTAGE OF STATE TOTAL
Atlantic	$427,725	60	$712,876	5.81
Bergen	419,620	36	1,165,612	9.50
Burlington	68,254	40	170,635	1.39
Camden	334,695	40.8	820,332	6.70
Cape May	99,408	41.9	237,250	1.94
Cumberland	51,230	44	116,432	.94
Essex	1,493,469	56	2,666,909	21.75
Gloucester	66,934	48.6	137,725	1.12
Hudson	1,208,429	60.3	2,004,029	16.35
Hunterdon	29,164	45.44	64,182	.52
Mercer	290,174	55	527,590	4.30
Middlesex	192,854	35	551,012	4.49
Monmouth	218,959	43	509,207	4.15
Morris	103,981	40.9	254,232	2.07
Ocean	46,357	44.65	103,824	.85
Passaic	533,907	56	953,407	7.77
Salem	33,620	53.2	63,195	.52
Somerset	63,188	45	140,419	1.15
Sussex	32,227	47.5	67,847	.55
Union	437,678	48.6	900,572	7.35
Warren	44,983	47.3	95,102	.78
State	6,196,866	100.00	12,262,389	100.00

Read: In 1928 the assessed valuation in Atlantic County was $427,725,000, which was 60 per cent of the true value. Therefore the true value was $712,876,000. This was 5.81 per cent of the State Total.

[13] New Jersey State Board of Taxes and Assessment, *Report for 1928.*

County with a true value of $18,604 is the median county of the State. The average for the State is $19,261. The middle fifty per cent ranges from $10,821 to $20,746. The high per pupil values found for Cape May County and for Atlantic County are due to the fact that these counties contain much seashore property with a high assessed valuation while they have comparatively few pupils. The low true values are found in Salem, Gloucester, Burlington, Cumberland, Hunterdon, and Warren

TABLE VI

ESTIMATED TRUE VALUE FROM TABLE IV, AVERAGE DAILY ATTENDANCE,[14] AND TRUE VALUE PER PUPIL

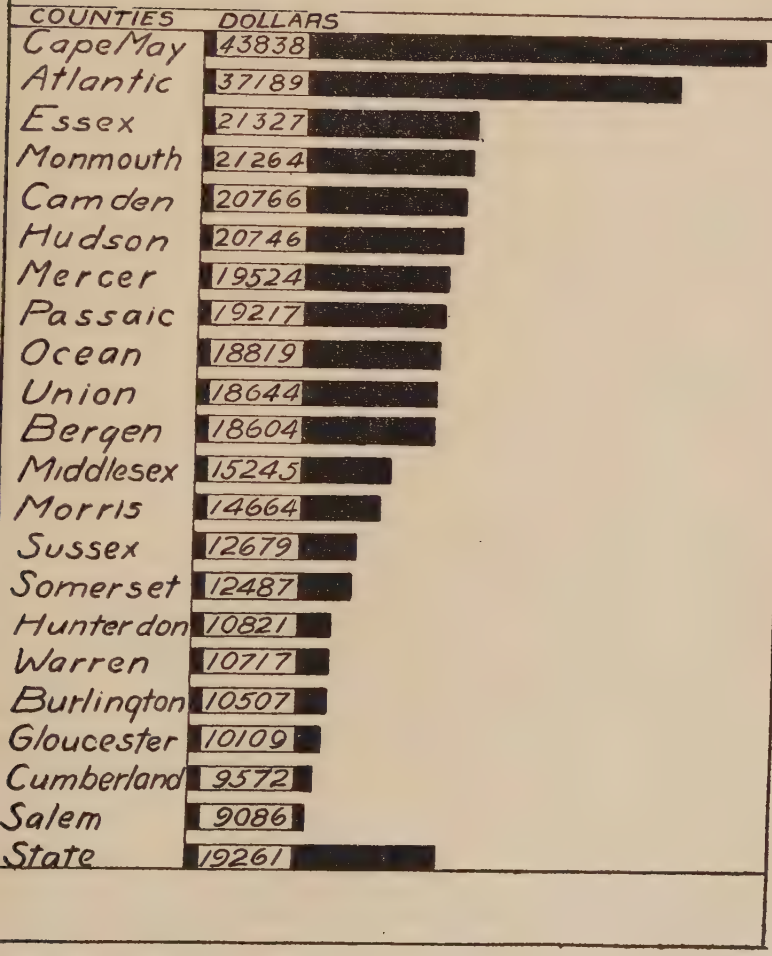
	ESTIMATED TRUE VALUE (IN THOUSANDS)	AVERAGE DAILY ATTENDANCE 1928	TRUE VALUE PER PUPIL IN AVERAGE DAILY ATTENDANCE
Atlantic	712,876	19,169	37,189
Bergen	1,165,612	62,652	18,604
Burlington	170,635	16,240	10,507
Camden	820,332	39,503	20,766
Cape May	237,250	5,412	43,838
Cumberland	116,432	12,163	9,572
Essex	2,666,909	125,046	21,327
Gloucester	137,725	13,624	10,109
Hudson	2,004,029	96,597	20,746
Hunterdon	64,182	5,931	10,821
Mercer	527,590	27,023	19,524
Middlesex	551,012	36,143	15,245
Monmouth	509,207	23,947	21,264
Morris	254,232	17,337	14,664
Ocean	103,824	5,517	18,819
Passaic	953,407	49,612	19,217
Salem	63,195	6,955	9,086
Somerset	140,419	11,245	12,487
Sussex	67,847	5,351	12,679
Union	900,572	48,303	18,644
Warren	95,102	8,874	10,717
State	12,262,389	636,644	19,261

Read: In 1928 Atlantic County had an estimated true value of $712,876-000, an average daily attendance of 19,169 pupils and a true value of $37,189 for every pupil.

[14] Data received from the New Jersey State Department of Education.

CHART 2

True Value per Pupil,
According to Table VI



Counties. These are largely agricultural counties and seem to follow a consistent policy of keeping low assessments on farm properties.

8. *Income*

Income, as used in this part of the study, is intended to show another phase of the wealth of the State. Total income is used rather than current income, for total income "comprises all the items listed under current income and, in addition, it includes surpluses and gains on inventories accruing to individuals."[15] Leven defines current income as follows: "Current income, though a somewhat hazy concept, may be defined as the excess of cash receipts over business expenses, plus the money value of income received in the form of commodities. It is estimated here by summating (1) wages, salaries and pensions, (2) profits withdrawn from business,(3) dividends, interest, and rent received by individuals, (4) the rental value of homes occupied by their owners, (5) interest upon the sums invested in household furnishings, clothing and the like, and (6) the value of commodities which families produce for their own consumption."[16]

The data for income were secured from the Crowell Publishing Company's publication, "The National Markets and National Advertising."[17] The basic tables for income of the states were furnished by the National Bureau of Economic Research to the Crowell Company. The latter then distributed the income to the counties by means of the formulae developed by Weaver in his study "The Development of a Basic Purchasing Power Index by Counties."[18]

Of the estimates of income, the Bureau of Economic Research says in Income in the Various States: "They are merely sums of those kinds of individual book incomes commonly accounted for in terms of money. If every individual kept an accurate set of

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[15] National Bureau of Economic Research, *Income in the Various States*, by Maurice Leven, p. 43.

[16] *Ibid.*, p. 28.

[17] Crowell Publishing Company, New York, *The National Markets and National Advertising*. Section devoted to New Jersey.

[18] Weaver, H. G., *The Development of a Basic Purchasing Power Index by Counties.*

private accounts and thereby arrived at his net money income for the year, and if all these net incomes were added together, the resulting totals would be those which this report attempts to approximate."[19]

The method of distribution of the estimated income of the states to the counties is described by Weaver as follows: "If we can develop some kind of formula which will enable us to estimate that which we already know—namely, incomes by states—and if, in the development of such a formula, we will confine ourselves to the use of only such data as are also available by counties, we will then feel warranted in venturing into the unknown by applying such a formula to counties within states.

"We know the income of each state. We desire to estimate the income for each county.

"Certain data, which bear some relation to income distribution, are available for both counties and states. Our problem is one of bridging the unknown through the use of any or all of these data which are commonly available to both counties and states.

"We will first attempt to determine, through a large number of experimental tests, just what data to use and how to use them. This will be done by attempting to estimate that which we already know through the use of material which is also available in the realm of the unknown.

"If these efforts are successful, in other words, if we are able to estimate state incomes with reasonable accuracy and without resorting to the use of data other than those which are also available by counties, we will then feel justified in assuming that the same methods will give similarly accurate results when applied to individual counties within individual states."[20]

The total income for New Jersey in 1927, the latest year for which estimates are available, is given as $3,246,500,000 by the Crowell Publishing Company.[21] In view of the fact that in 1927,

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[19] National Bureau of Economic Research, *Income in the Various States*, by Maurice Leven, p. 20.

[20] Weaver, H. G., *op. cit.*, p. 277.

[21] The Crowell Publishing Company, New York, *The National Markets and National Advertising.*

5.21 per cent of the population of the State of New Jersey filed individual income returns to the Federal Government amounting to $1,701,075,000,[22] which amount included personal exemptions and credit for dependents, and that corporations reported gross incomes amounting to $5,202,370,000,[23] the total income accepted here seems reasonable.

Table VII, on this page, gives the income of the counties and every county's percentage of the total for the State.

TABLE VII

ESTIMATED TOTAL INCOME IN THE STATE OF NEW JERSEY FOR THE YEAR 1926,[24], ESTIMATED TOTAL INCOME FOR EVERY COUNTY AND THE PERCENTAGE THAT EVERY COUNTY INCOME WAS OF THE STATE TOTAL
(In Thousands)

	TOTAL INCOME	PERCENTAGE OF THE STATE TOTAL
Atlantic	$103,888	3.20
Bergen	244,137	7.52
Burlington	60,710	1.87
Camden	212,646	6.55
Cape May	19,154	.59
Cumberland	36,685	1.13
Essex	786,627	24.23
Gloucester	43,503	1.34
Hudson	629,172	19.38
Hunterdon	20,128	.62
Mercer	157,455	4.85
Middlesex	135,379	4.17
Monmouth	103,239	3.18
Morris	82,136	2.53
Ocean	19,804	.61
Passaic	226,281	6.97
Salem	19,155	.59
Somerset	26,946	.83
Sussex	15,583	.48
Union	266,862	8.22
Warren	37,010	1.14
State	3,246,500	100.00

Read: If every individual kept an accurate set of private accounts and thereby arrived at his net money income for the year, and if all these net incomes were added together, Atlantic County would have approximately a total income of $103,888,000 or 3.20 per cent of State Total.

[22] United States Treasury Department, Bureau of Internal Revenue, *Statistics of Income for 1927*, pp. 66–67.
[23] *Ibid.*, Table 12, opposite p. 311.
[24] Crowell Publishing Company, *National Markets, 1927*.

9. *Income per Pupil*

The income of every county as given in Table VII was then divided by that county's number of pupils in average daily attendance. The results are given in the third column of figures in Table VIII, on this page. Hudson County with an income of $6,513 per pupil is the highest with Essex second. Somerset County with an income of $2,396 per pupil is the lowest. Bergen, whose income is $3,896 per pupil is the median county. The range of the middle fifty per cent extends from $3,393 to $5,383 per pupil. The average for the State is $5,099.

TABLE VIII

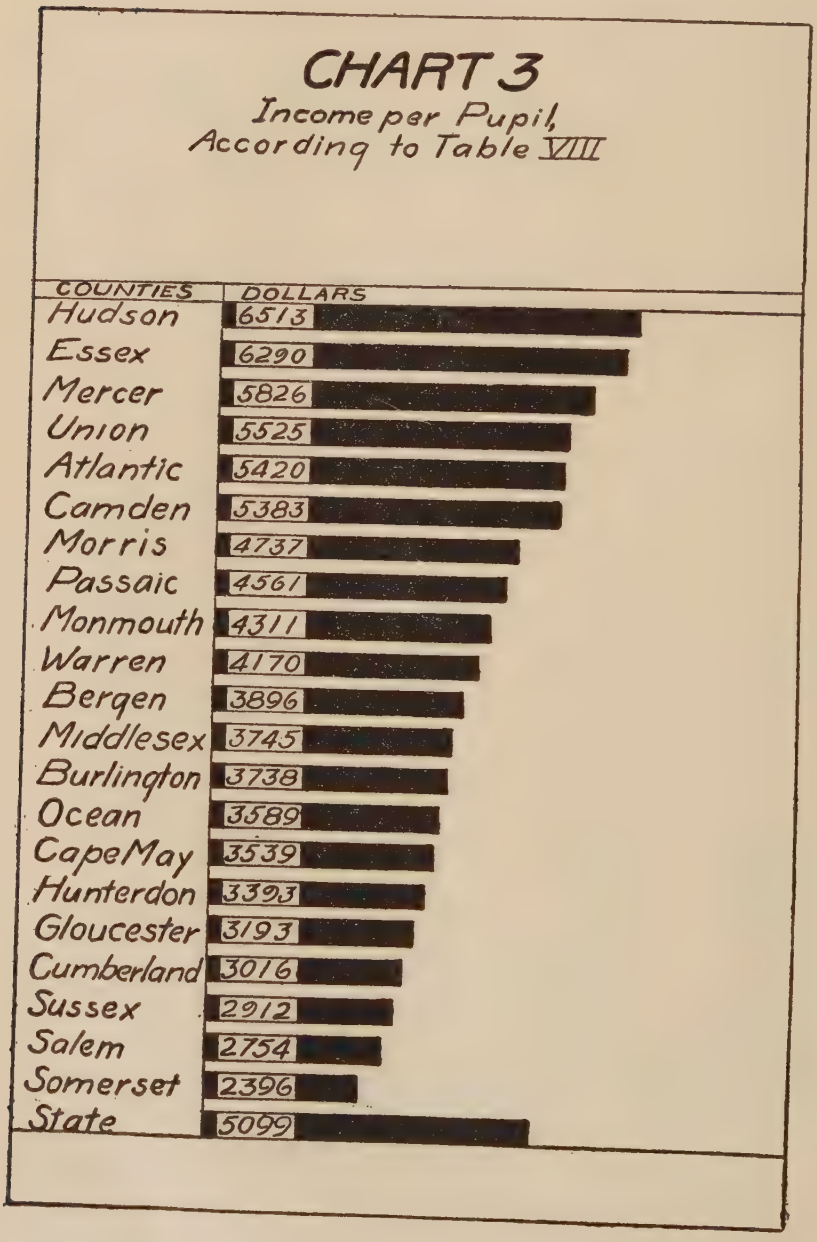
ESTIMATED TOTAL INCOME IN THE STATE OF NEW JERSEY, AVERAGE DAILY ATTENDANCE, AND INCOME PER PUPIL

	TOTAL INCOME (IN THOUSANDS)	AVERAGE DAILY ATTENDANCE 1928	INCOME PER PUPIL IN AVERAGE DAILY ATTENDANCE
Atlantic	103,888	19,169	5,420
Bergen	244,137	62,652	3,896
Burlington	60,710	16,240	3,738
Camden	212,646	39,503	5,383
Cape May	19,154	5,412	3,539
Cumberland	36,685	12,163	3,016
Essex	786,627	125,046	6,290
Gloucester	43,503	13,624	3,193
Hudson	629,172	96,597	6,513
Hunterdon	20,128	5,931	3,393
Mercer	157,455	27,023	5,826
Middlesex	135,379	36,143	3,745
Monmouth	103,239	23,947	4,311
Morris	82,136	17,337	4,737
Ocean	19,804	5,517	3,589
Passaic	226,281	49,612	4,561
Salem	19,155	6,955	2,754
Somerset	26,946	11,245	2,396
Sussex	15,583	5,351	2,912
Union	266,862	48,303	5,525
Warren	37,010	8,874	4,170
State	3,246,500	636,644	5,099

Read: In 1927 Atlantic County had an estimated total income of $103,888,000. It had 19,169 pupils and an income of $5,420 per pupil.

CHART 3

Income per Pupil,
According to Table VIII



10. *Bank Resources*

Table IX, page 42, shows the resources of all the banks in New Jersey during 1928. These data were compiled from the periodic reports of the individual banks as published by Rand-McNally Company in the Bankers' Directory.[25] At stated periods the banks report all their resources and their liabilities. The resources include loans and discounts, bonds and securities, miscellaneous, and cash and exchanges due from banks. The liabilities include paid-up capital, surplus and profits, deposits, and other liabilities.

While this factor of bank resources does not represent the same kind of economic resources that real estate does, it is an indication of the general volume of business that is done in the counties and in the State. A large portion of the bank's resources is employed in loans to business and to this degree it indicates the volume of business transacted in the community. For instance, the first bank listed on page 1166 of the Bankers' Directory reports its resources as follows:

Loans and Discounts	$1,532,590
Bonds and Securities	264,360
Miscellaneous	224,190
Cash and Exchanges	209,950

It will be seen that a large portion of this bank's resources are employed in furnishing funds to business in the locality through loans and discounts. This shows the business of one of the more modest of the banks of the State. But by examining the statement of the largest bank of the State, one can note the volume of business transacted through its activities. The total resources are as follows:

Loans and Discounts	$61,357,820
Bonds and Securities	75,976,540
Miscellaneous	3,739,060
Cash and Exchanges Due	14,500,520

This bank declared a dividend of 34 per cent of the capital

[25] Rand-McNally Company, *Banker's Directory for 1928.* Under the heading of New Jersey.

stock in 1928. However, Table IX, on this page, does not show the whole picture of banking in New Jersey, for undoubtedly many business firms have their financial connections in the large financial centers of New York and Philadelphia. So their transactions would not appear in this tabulation. Further there is no way of finding how great this transferred business might be. The authorities in this Federal Reserve District could render no assistance in this matter, nor could any aid be secured from other authorities on banking. However, in the report of the North Jersey Transit Commission this situation is discussed to some extent.

"Clearly, New Jersey has grown rapidly as compared to New York, the percentages of the total deposits located in New Jersey

TABLE IX

TOTAL BANK RESOURCES IN NEW JERSEY FOR THE YEAR 1928,[26]
(In Thousands)

	TOTAL BANK RESOURCES	PERCENTAGE OF STATE TOTAL
Atlantic	$91,513	3.33
Bergen	142,074	5.17
Burlington	35,383	1.29
Camden	67,551	2.46
Cape May	18,746	.68
Cumberland	24,871	.91
Essex	732,201	26.66
Gloucester	21,849	.80
Hudson	645,115	23.50
Hunterdon	19,891	.72
Mercer	141,292	5.14
Middlesex	108,051	3.93
Monmouth	92,456	3.37
Morris	73,129	2.66
Ocean	18,986	.70
Passaic	239,950	8.74
Salem	15,100	.55
Somerset	23,524	.86
Sussex	18,681	.68
Union	190,215	6.93
Warren	25,243	.92
State	2,745,821	100.00

Read: The Total Bank Resources of Atlantic County in 1928 were $91,513,000. These Resources were 3.33 per cent of the State Total.

[26] Compiled from Rand-McNally & Co., *Bankers' Directory for 1928.*

having more than doubled in the 38 years covered. Deposits in the New York Suburban Area have, however, expanded even more rapidly than in the similar area in New Jersey. Now New York City is the one section showing a steadily declining proportion of the deposit total. Such a change might however be ascribable mainly to shifts in population. While the average amount of deposits per person in the New York section of the Metropolitan Area has not even quadrupled, the per capita amount in the New Jersey section has been multiplied by eight. Again New York City is shown to be laggard, deposits there having but slightly more than trebled in the 38 years, while the multiples for 'Suburban New York' and the 'New Jersey Outer Ring' are nine and ten, respectively."[27]

"Both the outer and the inner rings of New Jersey Counties have forged ahead at a pace very rapid indeed as compared to that of Greater New York. During the eight years from 1915 to 1923, Monmouth shows a trend of deposits rising more rapidly than the trend in any other of the counties recorded. On the other hand, the per capita value of bank deposits in Greater New York has declined during the same period. Banking in the Metropolitan Area seems, then, at the present, to be under the control of forces centrifugal in their nature."[28]

From the above evidence, the tendency to use the New York financial centers seems to be decreasing. But for lack of further evidence, the totals of bank resources are assumed to be as nearly correct as the present conditions will permit them to be ascertained.

11. *Bank Resources Per Pupil*

Table X, page 44, shows the bank resources of every county of the State, the average daily attendance, and the bank resources per pupil. Hudson County had bank resources of $6,678 per pupil. This was the highest county. Gloucester County with resources of $1,604 per pupil was the lowest. Ocean County was the median county with per pupil resources of $3,441. The

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[27] New Jersey Transit Commission to the Senate and General Assembly of the State of New Jersey, *Report of 1927*, pp. 199–205.
[28] *Ibid.*, p. 207.

middle fifty per cent ranges from $2,268 to $4,218, while the average for the State was $4,313.

12. *Assets of Building and Loan Associations*

Building and Loan Associations are organized for the purpose of enabling persons of modest means to save money and to provide resources to draw upon for the purpose of building homes or to finance real estate purchases. The associations deal primarily in mortgages upon real estate. These mortgages are paid off in weekly or monthly instalments by borrowing members and the dues depend upon the number of shares of stock for which they have subscribed.

The funds with which a building and loan association operates

TABLE X

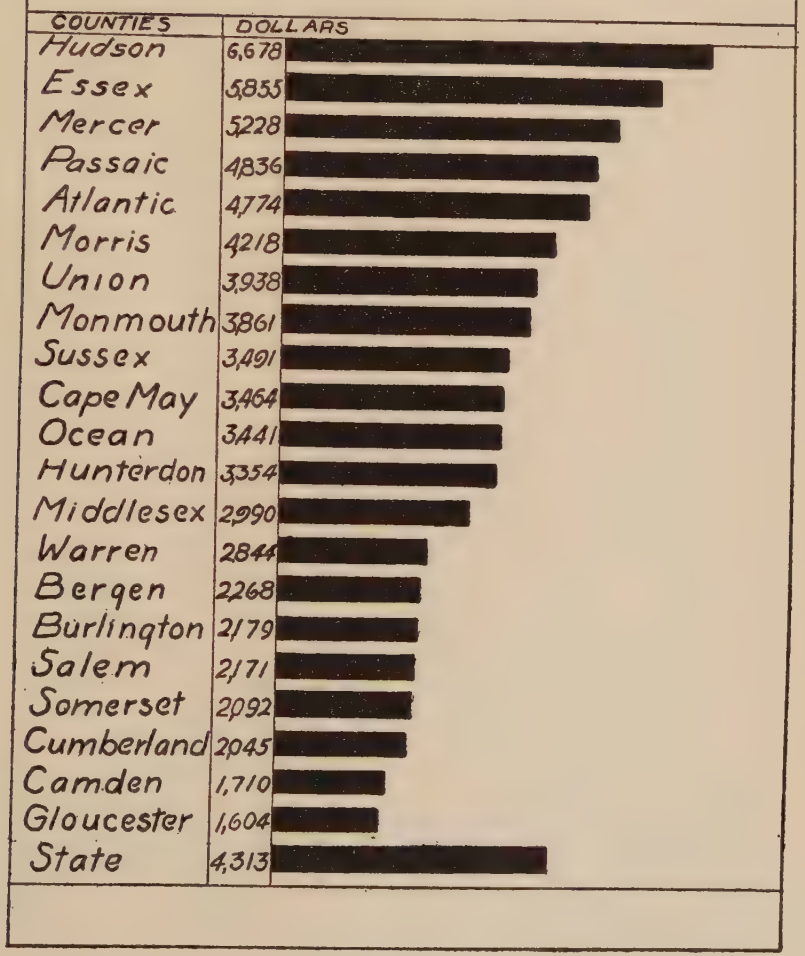
TOTAL BANK RESOURCES IN NEW JERSEY FOR 1928, AVERAGE DAILY ATTENDANCE, AND BANK RESOURCES PER PUPIL

	TOTAL BANK RESOURCES (IN THOUSANDS)	AVERAGE DAILY ATTENDANCE	TOTAL BANK RESOURCES PER PUPIL
Atlantic	91,513	19,169	4,774
Bergen	142,074	62,652	2,268
Burlington	35,383	16,240	2,179
Camden	67,551	39,503	1,710
Cape May	18,746	5,412	3,464
Cumberland	24,871	12,163	2,045
Essex	732,201	125,046	5,855
Gloucester	21,849	13,624	1,604
Hudson	645,115	96,597	6,678
Hunterdon	19,891	5,931	3,354
Mercer	141,292	27,023	5,228
Middlesex	108,051	36,143	2,990
Monmouth	92,456	23,947	3,861
Morris	73,129	17,337	4,218
Ocean	18,986	5,517	3,441
Passaic	239,950	49,612	4,836
Salem	15,100	6,955	2,171
Somerset	23,524	11,245	2,092
Sussex	18,681	5,351	3,491
Union	190,215	48,303	3,938
Warren	25,243	8,874	2,844
State	2,745,821	636,644	4,313

Read: Atlantic County in 1928 had Bank Resources amounting to $91,513,000 and 19,169 pupils. So it had $4,774 in Bank Resources per pupil.

CHART 4

Bank Resources per Pupil According to Table X



are secured by the sale of stock. The association opens subscriptions to the stock at regular intervals, usually six months or even more frequently. These series of stock are numbered first series, second series, third series and so on. The paid-up value of each share is usually two hundred dollars and the subscriber pays one dollar monthly for every share he holds, until such a time as the paid capital plus the accrued profits amount to two hundred dollars per share when the series is paid off. In most associations this requires about eleven years. A borrower continues to pay his regular monthly instalments plus a monthly interest on the amount he has borrowed. At the termination of his series he receives the value of his shares less the amount he borrowed.

The person who does not borrow but continues paying his regular instalments will invest $132 per share, for which he will receive $200. The difference between what was paid in and what was received, represents the accrued interest and profits, which are usually about 8 per cent. If the financial affairs of the association are especially profitable, the series may be paid out in shorter time thus affording a higher percentage of profit to the subscribers. Or in times of depression the series may run longer than eleven years thus cutting down the percentage of profit.

It will be noted that these associations conserve the resources of the community and that their funds represent the surplus of the subscribers. So this factor has been included in the evidence of wealth of the State as a distinct phase of the economic background. Further, building and loan assets assume a position of importance when compared with the other economic factors. Building and loan assets in 1928 were more than one-twelfth of the true value of the general property of the State, about one-third of the total income, nearly two-fifths of the total bank resources, and about two-sevenths of the value of products. So building and loan assets are of special interest in this study.

The data for Table XI, page 47, were secured from the report of the Commissioner of Banking and Insurance for New Jersey.[29] One interesting feature of this table is the evidence that urban

[29] Commissioner of Banking and Insurance, *Report Relative to Building and Loan Associations*, December 31, 1928, p. IX.

communities seem to be greatly interested in building and loan associations while the rural communities take but little interest in them. This is due, probably, to the nature of agricultural operations that require all the available capital at particular times of the year, and so the income of the farmer is not as regular as that of the salaried people or the wage earners. So it is more difficult for the farmer to avail himself of the advantages of building and loan associations.

13. *Building and Loan Assets Per Pupil*

Table XII, page 48, shows building and loan assets reduced to the per pupil basis. Essex County had 48 per cent of the total building and loan assets of the State, so it is by far the highest

TABLE XI

BUILDING AND LOAN ASSOCIATION ASSETS AS OF DECEMBER 31, 1928.[30]
(In Thousands)

	BUILDING AND LOAN ASSETS	PERCENTAGE OF STATE TOTAL
Atlantic	47,224	4.34
Bergen	78,514	7.22
Burlington	15,151	1.39
Camden	57,590	5.29
Cape May	8,246	.76
Cumberland	10,407	.96
Essex	521,694	47.95
Gloucester	10,902	1.00
Hudson	106,564	9.79
Hunterdon	1,341	.12
Mercer	13,963	1.28
Middlesex	36,841	3.38
Monmouth	36,694	3.37
Morris	13,474	1.24
Ocean	5,473	.50
Passaic	50,967	4.68
Salem	1,810	.17
Somerset	4,581	.42
Sussex	892	.08
Union	63,351	5.82
Warren	2,604	.24
State	1,088,283	100.00

Read: In 1928 Atlantic County had Building and Loan Assets to the value of $47,224,000, which was 4.34 per cent of the total for the State.

[30] *Item*

with per pupil assets of $4,172. Sussex County is the lowest in this distribution with assets of $167 per pupil. The middle fifty per cent ranges from $517 to $1,311. The median county is Ocean with $992, while the average for the State is $1,709.

14. *Value of Products*

This factor of economic resources includes the value of goods produced in the four major activities—manufacturing, agriculture, mining and fishing—and indicates the wealth arising from these sources. The data concerning this factor were secured from the Market Data Handbook of the United States,[31]

TABLE XII

BUILDING AND LOAN ASSOCIATION ASSETS, AVERAGE DAILY ATTENDANCE AND BUILDING AND LOAN ASSOCIATION ASSETS PER PUPIL

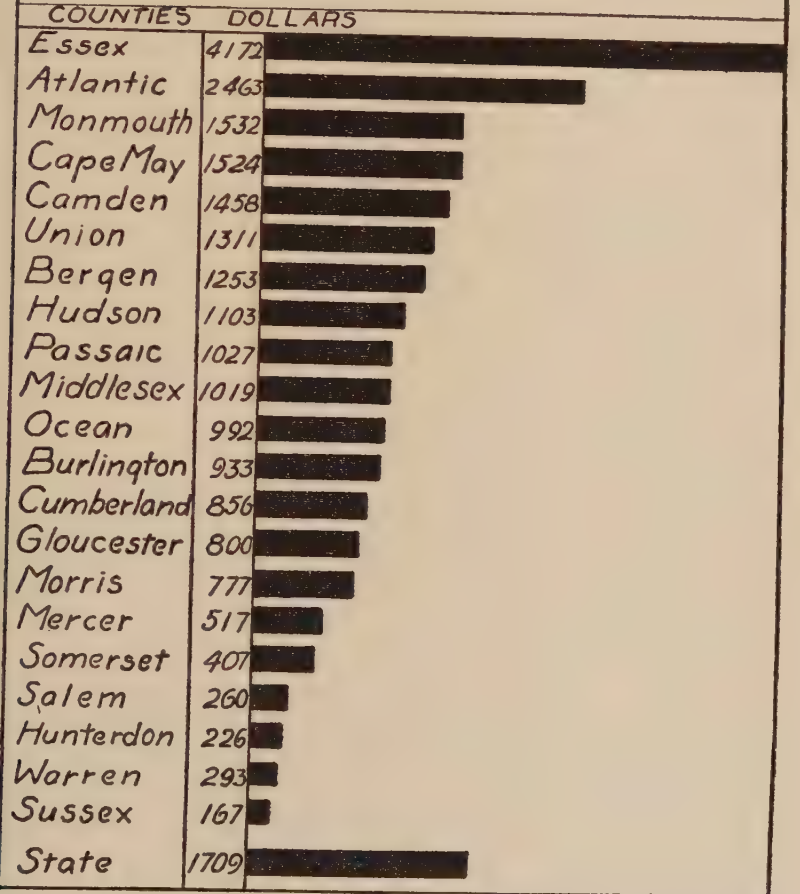
	BUILDING AND LOAN ASSETS (IN THOUSANDS)	AVERAGE DAILY ATTENDANCE	BUILDING AND LOAN ASSETS PER PUPIL
Atlantic	47,224	19,169	2,463
Bergen	78,514	62,652	1,253
Burlington	15,151	16,240	933
Camden	57,590	39,503	1,458
Cape May	8,246	5,412	1,524
Cumberland	10,407	12,163	856
Essex	521,694	125,046	4,172
Gloucester	10,902	13,624	800
Hudson	106,564	96,597	1,103
Hunterdon	1,341	5,931	226
Mercer	13,963	27,023	517
Middlesex	36,841	36,143	1,019
Monmouth	36,694	23,947	1,532
Morris	13,474	17,337	777
Ocean	5,473	5,517	992
Passaic	50,967	49,612	1,027
Salem	1,810	6,955	260
Somerset	4,581	11,245	407
Sussex	892	5,351	167
Union	63,351	48,303	1,311
Warren	2,604	8,874	293
State	1,088,283	636,644	1,709

Read: Atlantic County had Building and Loan Assets of $47,224,000, Average Daily Attendance of 19,169 and Building and Loan Assets of $2,463 per Pupil.

[31] Domestic Commerce Division, Department of Commerce, *Market Data Handbook*, Sections pertaining to New Jersey.

CHART 5

Building and Loan Assets per Pupil, According to Table XII



published by the Domestic Commerce Division of the Depart ment of Commerce. The material of this publication was taker from authoritative sources and is regarded as very reliable.

Manufacturing is one of the chief interests in New Jersey The value of the products is relatively high, amounting t \$3,417,450,248 in 1927, the latest year for which informatio was available.[32] This value does not make any allowance fo the cost of the raw material nor for the expense of manufacturing but shows the gross factory value of the manufactured product Another figure frequently used in this connection is "valu added by manufacture." In this case it is about 42.7 per cen of the value of manufactures. But the value of manufacture was accepted upon the assumption that it probably shows mor clearly the importance of the manufacturing interests.

The information regarding agriculture was taken from a specia report of the Department of Agriculture for 1925.[33] This repor was not complete but as it is the latest that was issued, it is the bes that could be secured. The farm products were not as fully reported as in the census report of 1920 and to that degree doe not fully reflect the importance of agriculture, but it is th latest information available on the subject.

The chief mineral products of New Jersey in order of value ar clay products, zinc, cement, stone, sand and gravel. The valu of the mineral products in 1927 was \$73,064,418.[34] The fishin interests of the State, which are of considerable importanc along all the coastal portions, amounted to \$6,254,264 in 1927.[3

The total value of products of New Jersey found in these dat amounted to \$3,525,653,000 as seen in Table XIII, page 51.

15. *Value of Products Per Pupil*

The value of products per pupil as found for the several countie shows a very wide range. This range extends from \$683 for th lowest county, Cape May, to \$12,256 for Middlesex County, th highest. The median county, Gloucester, shows a per pup

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[32] A Special Report of the Census of Manufacturing, 1927.
[33] A Special Report of the Department of Agriculture, 1925.
[34] *Report of the Bureau of Mining, 1927*, p. A 7.
[35] *Report of the Bureau of Fisheries, 1927*, p. 475

value of $4,530. The middle fifty per cent lies between $3,100 and $5,587. The average for the State is $5,538. Table XIV, page 52, shows the per pupil values for the several counties.

16. *The Averages of the Percentages for Wealth*

The next step was to collect the five percentages, which were employed to indicate the wealth of the different counties, and to combine them into averages. The geometric average was used in this case, for authorities agree that this is the best average to use in reducing the various forms of indices to a comparable

TABLE XIII

VALUE OF PRODUCTS OF MANUFACTURING, AGRICULTURE, MINING AND FISHERIES[36]

	VALUE OF PRODUCTS (IN THOUSANDS)	PERCENTAGE OF STATE TOTAL
Atlantic	19,031	.54
Bergen	205,245	5.82
Burlington	66,228	1.88
Camden	220,719	6.26
Cape May	3,698	.11
Cumberland	37,709	1.07
Essex	657,896	18.66
Gloucester	61,726	1.75
Hudson	782,172	22.19
Hunterdon	18,834	.54
Mercer	145,428	4.12
Middlesex	442,972	12.56
Monmouth	37,856	1.07
Morris	62,750	1.78
Ocean	4,024	.12
Passaic	350,282	9.93
Salem	40,089	1.14
Somerset	35,931	1.02
Sussex	12,076	.34
Union	272,461	7.73
Warren	48,526	1.37
State	3,525,653	100.00

Read: The value of the products in Atlantic County was $19,031,000 which was .54 per cent of the State total.

[36] Domestic Commerce Division, Department of Commerce, Washington, D. C., *Market Data Handbook of the United States.* Compiled from Sections pertaining to New Jersey.

basis. This method of averaging percentages has been discuss by Fisher,[37] Riegel[38] and others. The results have been call index numbers, but as these were not the final figures intend the term "average" will be employed to mean in this connecti the geometric average.

The general method of finding the geometric average is multiply together the various items of a series of numbers and extract the nth root of the product. This may best be done the use of logarithms. In this instance, the items were the fi

TABLE XIV

VALUE OF PRODUCTS OF MANUFACTURING, AGRICULTURE, MINING AND FISH IES, AVERAGE DAILY ATTENDANCE AND VALUE OF PRODUCTS PER PUPIL

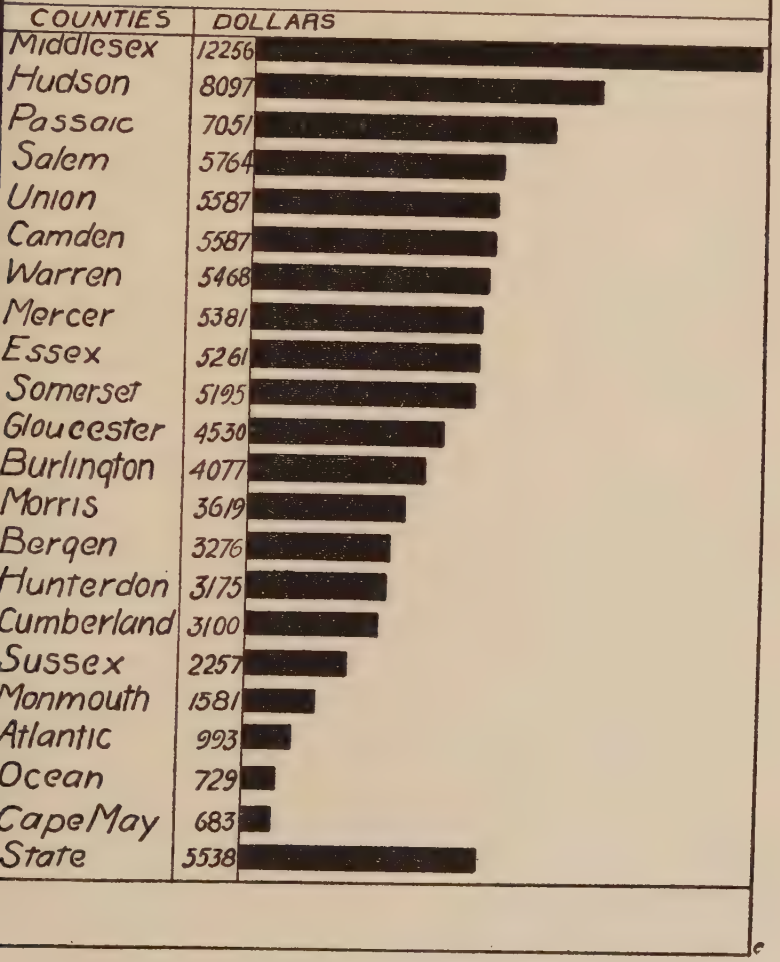
	VALUE OF PRODUCTS (IN THOUSANDS)	AVERAGE DAILY ATTENDANCE	VALUE O PRODUCT PER PUPI
Atlantic	19,031	19,169	993
Bergen	205,245	62,652	3,276
Burlington	66,228	16,240	4,077
Camden	220,719	39,503	5,587
Cape May	3,698	5,412	683
Cumberland	37,709	12,163	3,100
Essex	657,896	125,046	5,261
Gloucester	61,726	13,624	4,530
Hudson	782,172	96,597	8,097
Hunterdon	18,834	5,931	3,175
Mercer	145,428	27,023	5,381
Middlesex	442,972	36,143	12,256
Monmouth	37,856	23,947	1,581
Morris	62,750	17,337	3,619
Ocean	4,024	5,517	729
Passaic	350,282	49,612	7,051
Salem	40,089	6,955	5,764
Somerset	35,931	11,245	5,195
Sussex	12,076	5,351	2,257
Union	272,461	48,303	5,641
Warren	48,526	8,874	5,468
State	3,525,653	636,644	5,538

Read: The value of the products of Atlantic County was $19,031,000, A age Daily Attendance was 19,169, and value of products per pupil was $99

[37] Fisher, Irving, *The Making of Index Numbers*, p. 35.
[38] Riegel, Robert, *The Elements of Business Statistics*, p. 743.

CHART 6

Value of Products per Pupil According to Table XIV



percentages representing the wealth of each county. These wer multiplied together and the fifth root of the product was extracted For illustration, according to Table XV, Atlantic County had

5.81% of the True Value	log	0.76418
3.20% of the Income	log	0.50515
3.33% of the Bank Resources	log	0.52244
4.34% of the Building and Loan Assets	log	0.63749
.54% of the Value of Products	log	9.73239–1
	5)	12.16165–1
		2.43233–

The 2's cancel and the number corresponding to log 0.43233 is 2.71 th geometric average for Atlantic County.

The same procedure was followed in calculating the averag for every county and it was assumed that this average repre sented the wealth of the county as far as wealth was defined by th economic factors that were presented. Table XV, page 55, show the percentages and the average for every county. The wealth counties were Essex, Hudson, Passaic, Union, Bergen and Cam den. The poorer counties were Sussex, Hunterdon, Ocean Salem, Cape May, Somerset and Warren. The rest were fairl close to the median which was Morris County.

17. *"Duty" as Expressed by Average Daily Attendance*

The term "duty", as used in this connection, is intended t express the educational responsibility of the several counti towards their pupils. There was at the time no State census o the pupils of school age in New Jersey, so it was necessary to tur to other sources of information.

A number of factors were considered, such as (1) total popul tion, (2) estimated number of children between the ages of years and 20 years for whom provision is made in the scho code,[39] (3) total enrolment, (4) average enrolment, (5) averag daily attendance, (6) elementary school enrolment, and (7) hig school enrolment by counties. When the percentages for the various factors were assembled, it was found that the resultin averages were very close to the percentages for the differe

[39] *New Jersey School Laws*, Edition of 1928, p. 122, Article IX.

factors, so that any of these factors might be used without affecting the relative standing of the counties. So, average daily attendance, as previously defined, was selected to express the "duty" of the counties in 1928.

The data for average daily attendance were secured from the State Department of Education through the kindness of Mr. Charles D. Anderson, Chief Statistician, from reports that were not published at the time.

TABLE XV

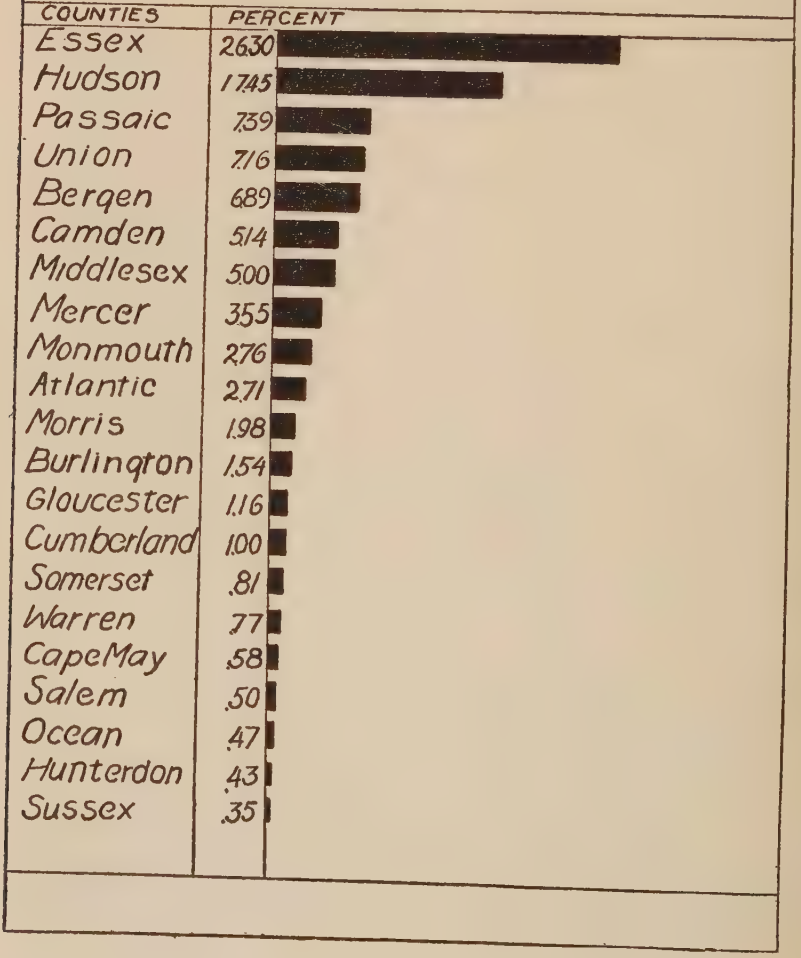
SHOWING THE PERCENTAGE THAT EVERY COUNTY HAD OF THE DIFFERENT ECONOMIC FACTORS AND THE GEOMETRIC AVERAGE OF THE PERCENTAGES FOR EVERY COUNTY

	TRUE VALUE	INCOME	BANK RESOURCES	BUILDING AND LOAN ASSETS	VALUE OF PRODUCTS	GEOMETRIC AVERAGES OF PERCENTAGES
Atlantic	5.81	3.20	3.33	4.34	.54	2.71
Bergen	9.50	7.52	5.17	7.22	5.82	6.89
Burlington	1.39	1.87	1.29	1.39	1.88	1.54
Camden	6.70	6.55	2.46	5.29	6.26	5.14
Cape May	1.94	.59	.68	.76	.11	.58
Cumberland	.94	1.13	.91	.96	1.07	1.00
Essex	21.75	24.23	26.66	47.95	18.66	26.30
Gloucester	1.12	1.34	.80	1.00	1.75	1.16
Hudson	16.35	19.38	23.50	9.79	22.19	17.45
Hunterdon	.52	.62	.72	.12	.54	.43
Mercer	4.30	4.85	5.14	1.28	4.12	3.55
Middlesex	4.49	4.17	3.93	3.38	12.56	5.00
Monmouth	4.15	3.18	3.37	3.37	1.07	2.76
Morris	2.07	2.53	2.66	1.24	1.78	1.98
Ocean	.85	.61	.70	.50	.12	.47
Passaic	7.77	6.97	8.74	4.68	9.93	7.39
Salem	.52	.59	.55	.17	1.14	.50
Somerset	1.15	.83	.86	.42	1.02	.81
Sussex	.55	.48	.68	.08	.34	.35
Union	7.35	8.22	6.93	5.82	7.73	7.16
Warren	.78	1.14	.92	.24	1.37	.77

Read: Atlantic County had 5.81 per cent of the True Value, 3.20 per cent of the Income, 3.33 per cent of the Bank Resources, 4.34 per cent of the Building and Loan Assets, .54 per cent of the Value of Products of the State; therefore the Geometric Average of 2.67 per cent of the Wealth of the State as measured by these factors.

CHART 7

Geometric Averages of the Economic Factors that Represent the Wealth of the Counties as of 1928. See Table XV



Average daily attendance and the percentage for every county in 1928 are shown in Table XVI, on this page.

18. *"Effort" as Expressed by School Taxes Paid*

The term "effort" is intended to express the interest that the several counties have in their schools by the amount of money that they actually tax themselves for the support of public education. For this purpose, the actual amount of state and local taxes was determined. The total of state and local taxes for

TABLE XVI

AVERAGE DAILY ATTENDANCE,[40] AND THE PERCENTAGE OF THE STATE TOTAL FOR EVERY COUNTY

	AVERAGE DAILY ATTENDANCE	PERCENTAGE OF AVERAGE DAILY ATTENDANCE
Atlantic	19,169	3.01
Bergen	62,652	9.85
Burlington	16,240	2.55
Camden	39,503	6.20
Cape May	5,412	.85
Cumberland	12,163	1.92
Essex	125,046	19.65
Gloucester	13,624	2.13
Hudson	96,597	15.17
Hunterdon	5,931	.93
Mercer	27,023	4.25
Middlesex	36,143	5.67
Monmouth	23,947	3.76
Morris	17,337	2.72
Ocean	5,517	.86
Passaic	49,612	7.79
Salem	6,955	1.10
Somerset	11,245	1.76
Sussex	5,351	.85
Union	48,303	7.58
Warren	8,874	1.40
State	636,644	100.00

Read: Atlantic County had 19,169 pupils in average daily attendance in 1928, which was 3.01 per cent of the State total.

[40] Data furnished by Mr. Charles D. Anderson, Chief Statistician for the Department of Education of New Jersey from unpublished reports.

public school purposes is shown in Table XVII, on this page[41].

The total of taxes for public school purposes was selected instead of the total cost of schools for the year 1928, because part of the total cost comes from other sources and does not represent a direct tax upon the county or local community. The total cost of public schools will be used later in this study, but here it seemed more to the purpose to use the amount of money that shows a direct levy upon the people.

The first column of figures in Table XVII, on this page, shows the

TABLE XVII

TOTAL OF TAXES PAID BY EVERY COUNTY IN NEW JERSEY DURING THE FISCAL YEAR OF 1927–1928, EVERY COUNTY'S PER CENT OF THE STATE TOTAL AND THE TAXES PAID PER PUPIL.[42]

	TAXES PAID BY THE COUNTIES IN 1927–1928	PER CENT OF THE STATE TOTAL	TAXES PAID PER PUPIL
Atlantic	3,443,891.20	3.99	179.66
Bergen	8,037,766.35	9.31	128.29
Burlington	1,515,148.71	1.75	93.29
Camden	4,812,235.36	5.57	121.82
Cape May	818,836.52	.95	151.30
Cumberland	949,119.94	1.10	78.03
Essex	20,253,992.07	23.45	161.18
Gloucester	1,349,458.70	1.56	99.05
Hudson	14,706,730.33	17.03	141.90
Hunterdon	473,648.69	.55	79.86
Mercer	3,891,803.59	4.51	144.00
Middlesex	4,160,493.88	4.82	115.11
Monmouth	2,976,515.29	3.45	124.30
Morris	2,155,110.33	2.50	124.30
Ocean	649,937.40	.75	117.80
Passaic	6,228,734.39	7.21	125.55
Salem	512,632.39	.59	73.70
Somerset	1,088,188.92	1.26	96.77
Sussex	476,370.37	.55	89.02
Union	7,144,719.66	8.27	147.91
Warren	718,160.46	.83	80.93
State	86,363,494.55	100.00	135.65

Read: Atlantic County paid $3,443,891.20 in state and local school taxes, which was 3.99 per cent of the state total and at the rate of $179.66 per pupil.

[41] Compiled from data received from Mr. Charles D. Anderson, Chief Statistician of the Department of Education for New Jersey.

[42] Compiled from data furnished by the Department of Education of New Jersey.

total of state and local taxes paid for school purposes. The second column shows the percentage of the state total that was paid by every county. But as in the case of "wealth" these figures are more significant in relation to the number of pupils that were educated. So column three shows the sum per pupil that every county paid in direct taxes during 1928. According to the figures of column three, Atlantic County paid $179.66 per pupil and was the highest county in the State. Salem County was the lowest with a payment of $73.70 per pupil. Camden County was the median with $121.82 per pupil. The average for the State was $135.65.

19. *Comparisons*

The first comparison is an attempt to determine to what extent, under the existing circumstances, the efforts of the counties are commensurate with their wealth and duty.

There is no thought of setting up an ideal educational situation and then determining whether the counties measure up to it. At the present time no one knows how much money a community should spend for education or when sufficient educational opportunities have been provided. So under the circumstances, the present practice is accepted and the attempt is made to show how the counties measured up to their economic possibilities in 1928.

For this purpose the averages for wealth, as shown in Table XV, page 55, the percentages for duty, as shown in Table XVI, page 57, and the percentages for effort, as shown in Table XVII, page 58, were selected for comparison. The usual way to compare these factors is to divide wealth by the number of pupils to be educated, and to divide effort by the same number, then to compare the results. The manner in which it was done in this case can best be explained by the following formula:

$$\frac{\text{Wealth}}{\text{Duty}} \quad \text{equals Ratio A.}$$

$$\frac{\text{Effort}}{\text{Duty}} \quad \text{equals Ratio B.}$$

then

$$\frac{\text{Wealth}}{\text{Duty}} : \frac{\text{Effort}}{\text{Duty}} :: 1 : X$$

$$\frac{\frac{\text{Effort}}{\text{Duty}}}{\frac{\text{Wealth}}{\text{Duty}}} \text{ equals } X$$

But Duty drops out by cancellation and the result is $\frac{\text{Effort}}{\text{Wealth}}$ equals X, which indicates the relationship between Wealth, Duty, and Effort.

The index numbers, which are the result of using this formula, are shown in Table XVIII, page 61. The median for this series is Monmouth County with an index of 1.25. Apparently the counties that are doing the most for education when wealth and number of children are considered are Cape May, Ocean, Sussex, Somerset, Atlantic, and Bergen. The county that is apparently doing the least in proportion to its wealth is Essex, the wealthiest county in the State, while Middlesex, Passaic and Hudson are relatively low in their contributions to the cause of education.

The second comparison was made in order to show that none of the counties was unduly burdened by taxation in support of schools and that the rate of taxation was not excessive. In this comparison the true value per pupil, as shown in Table VI, was taken for every county and compared with the taxes raised by the county for every pupil, as shown in Table XVII, page 58. The results given in Table XIX, page 63, show the rates of taxation that would have been necessary, under these conditions, to meet the per pupil expenditure. The rates range from 3.45 mills in Cape May County to 9.8 mills in Gloucester County. Surely no one can claim that such rates are unduly high or that such taxation is excessive. In fact they are modest when the educational standing of New Jersey is taken into account. Further, attention is called to the fact that only one of the economic factors was considered in this connection. The others will be discussed later, but if they were included here,

they would reduce the estimate on true value considerably.

The third comparison is a display of the economic resources reduced to the per pupil basis. Every one of the economic resources of the several counties was divided by the number of pupils and the results were gathered into Table XX, page 64.

An inspection of this display of economic resources per pupil is interesting. The high true values in Atlantic, Cape May, and Ocean Counties are due, as previously noted, to the fact that these are seashore communities and the high assessed valuations are produced by the real estate developments. On the other

TABLE XVIII

COMPARISON OF THE GEOMETRIC AVERAGES, WHICH INDICATE THE WEALTH, WITH THE PERCENTAGES FOR EFFORT TO FORM THE INDEX NUMBERS, WHICH SHOW THE RELATIVE EFFECTIVENESS OF THE COUNTIES IN PROVIDING FUNDS FOR PUBLIC EDUCATION[43]

	GEOMETRIC AVERAGES FOR WEALTH	PERCENTAGES FOR EFFORT	INDEX NUMBERS
Atlantic	2.71	3.99	1.47
Bergen	6.89	9.31	1.35
Burlington	1.54	1.75	1.14
Camden	5.14	5.57	1.08
Cape May	.58	.95	1.64
Cumberland	1.00	1.10	1.10
Essex	26.30	23.45	.89
Gloucester	1.16	1.56	1.34
Hudson	17.45	17.03	.98
Hunterdon	.43	.55	1.28
Mercer	3.55	4.51	1.27
Middlesex	5.00	4.82	.96
Monmouth	2.76	3.45	1.25
Morris	1.98	2.50	1.26
Ocean	.47	.75	1.60
Passiac	7.39	7.21	.97
Salem	.50	.59	1.18
Somerset	.81	1.26	1.55
Sussex	.35	.55	1.57
Union	7.16	8.27	1.15
Warren	.77	.83	1.08

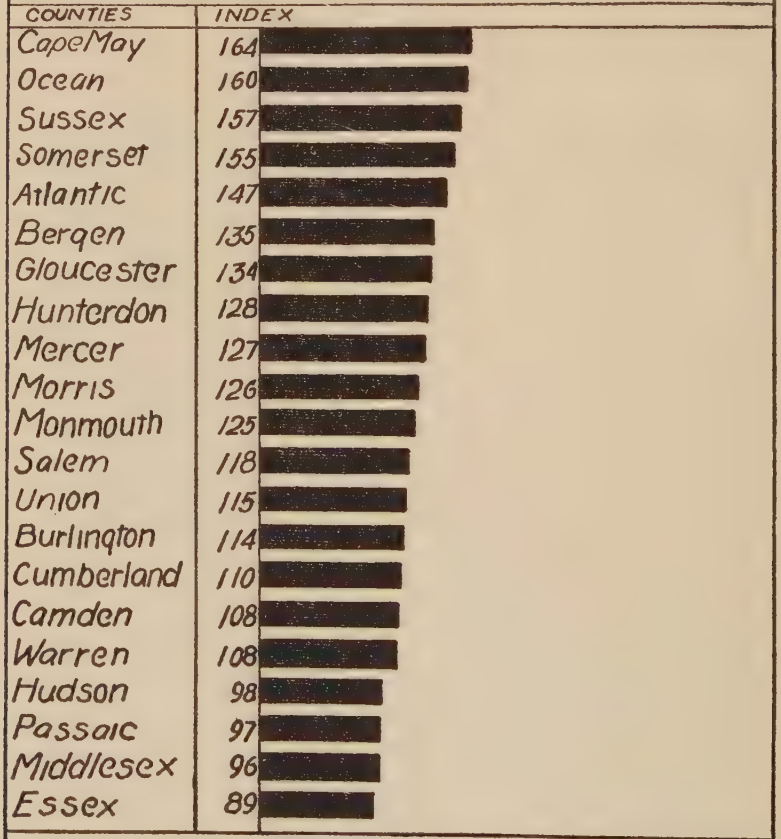
Read: Atlantic County had 2.67 per cent of the Wealth of the State and paid 3.99 per cent of the taxes for schools; so 1.49 would indicate the relative efficiency of Atlantic County.

[43] Computed from the data previously presented.

CHART 8

Relative Efficiency of the Counties in Providing Funds for Public Education

See Table XVIII



hand, the value of products in these counties is low for the products of the resort area do not appear under this heading but may be found under the heading of income.

The counties that are mostly agricultural are distinguished by the low true values and the comparatively high value of products. The manufacturing counties are marked by high income, bank resources, and value of products. As mentioned before, the rural communities do not have much interest in building and loan activities. These activities are found to flourish particularly well in the urban communities or in places in which real estate operations are developing.

TABLE XIX

TRUE VALUE OF GENERAL PROPERTY PER PUPIL, TAXES PAID PER PUPIL WITH THE ESTIMATED RATE OF TAXATION FOR EVERY COUNTY OF THE STATE[44]

	TRUE VALUE PER PUPIL	TAXES PAID PER PUPIL	RATE OF TAXATION
Atlantic	37,189	179.66	.00483
Bergen	18,604	128.29	.00635
Burlington	10,507	93.29	.00882
Camden	20,766	121.82	.00586
Cape May	43,838	151.30	.00345
Cumberland	9,572	78.03	.00815
Essex	21,327	161.18	.00756
Gloucester	10,109	99.05	.00980
Hudson	20,746	141.90	.00684
Hunterdon	10,821	79.86	.00738
Mercer	19,524	144.00	.00737
Middlesex	15,245	115.11	.00755
Monmouth	21,264	124.30	.00584
Morris	14,664	124.30	.00848
Ocean	18,819	117.80	.00626
Passaic	19,217	125.55	.00653
Salem	9,086	73.70	.00811
Somerset	12,487	96.77	.00775
Sussex	12,679	89.02	.00702
Union	18,644	147.91	.00793
Warren	10,717	80.93	.00755
State	19,261	135.65	.00704

Read: In 1928 Atlantic County had an estimated true value of $37,189 for every pupil, and paid school taxes amounting to $179.66 for every pupil. This was at the rate of 4.83 ills on the dollar.

[44] Computed from data previously presented.

TABLE XX

TABULATION OF THE ECONOMIC RESOURCES WHICH WERE REDUCED TO A PER PUPIL BASIS AND PRESENTED IN PRECEDING TABLES

	TRUE VALUE	INCOME	BANK RESOURCES	BUILDING AND LOAN ASSETS	VALUE OF PRODUCTS
Atlantic	37,189	5,420	4,774	2,463	993
Bergen	18,604	3,896	2,268	1,253	3,276
Burlington	10,507	3,738	2,179	933	4,077
Camden	20,766	5,383	1,710	1,458	5,587
Cape May	43,838	3,539	3,464	1,524	683
Cumberland	9,572	3,016	2,045	856	3,100
Essex	21,327	6,290	5,855	4,172	5,261
Gloucester	10,109	3,193	1,604	800	4,530
Hudson	20,746	6,513	6,678	1,103	8,097
Hunterdon	10,821	3,393	3,354	226	3,175
Mercer	19,524	5,826	5,228	517	5,381
Middlesex	15,245	3,745	2,990	1,019	12,256
Monmouth	21,264	4,311	3,861	1,532	1,581
Morris	14,664	4,737	4,218	777	3,619
Ocean	18,819	3,589	3,441	992	729
Passaic	19,217	4,561	4,838	1,027	7,051
Salem	9,086	2,754	2,171	260	5,764
Somerset	12,487	2,396	2,092	407	5,195
Sussex	12,679	2,912	3,491	167	2,257
Union	18,644	5,525	3,938	1,311	5,641
Warren	10,717	4,170	2,844	293	5,468
State	19,261	5,099	4,313	1,709	5,538

Read: In 1928 Atlantic County had true value of $37,189, income of $5,420, bank resources of $4,774, building and loan assets of $2,463, value of products of $993 for every pupil.

20. *Conclusions*

From the data presented in this section, the following conclusions can be drawn: 1. On the basis of true value alone (see Table XIX) page 63, the counties could maintain the present standard of public education by the use of a comparatively low tax rate. 2. If the other economic factors (see Table XX, above) were scientifically utilized in taxation there would be abundant resources in the State of New Jersey to support public education without overburdening anyone. 3. As a complete correspondence between wealth and effort would be given an index of 1.00, it

will be seen in Table XVIII page 61, that the counties, with four exceptions, are relatively effective in providing their proportionate contribution of total funds needed for public education. These four counties, that are below the index 1.00, are the wealthiest counties of the State as is shown in Table XV, page 55, column 1 and Chart 7.

III

The Economic Factors as Bases of Taxation

1 *Introduction*

In the preceding chapter the economic resources of the State were discussed and compared with the number of pupils in average daily attendance and with the taxes raised by direct taxation of the counties and local districts. The conclusion reached was that there are abundant resources in the State of New Jersey to support the present system of public schools without any undue burden upon anyone, if the available resources could be properly utilized for taxation.

This chapter will be devoted to the analysis of the present financial situation in the counties of New Jersey with respect to the provision of funds for public purposes, and to show (1) the sources of funds for the support of public education and (2) what the results would be if the several economic factors were considered as the bases of taxation for public school purposes.

2. *Analysis of the Sources of Revenue in New Jersey*

There are three different divisions of government in New Jersey that require revenue from the available sources. These divisions are the local divisions, the county, and the state.

Among the different taxes that the State imposes, the tax on general property is the most important. The other taxes will be discussed later, but at this point it seems desirable to deal briefly with the general property tax and show its connection with the county and local taxes. The State Comptroller apportions the amount of the state taxes on general property among the counties on the basis of the preceding year's ratables. The County Board of Taxation adds to this apportionment the sums needed for county purposes and subdivides the total among the taxing districts on the basis of the current year's ratables,[1] in

[1] Ratables refers to property that is liable to taxation or rates; as, ratable property.

order to ascertain what each district must raise. The rate for the state and county taxes is included in the local rates.

The local assessors include the state and county apportionments in the estimates for the local needs and fix the local tax rates accordingly.

The revenue for the local needs comes from the tax on general property, miscellaneous sources[2] and one-half of the bank stock tax. The local apportionment of the state and county is sent by the local collector to the County Treasurer. The total county apportionments are sent by the County Treasurer to the State Treasurer.

The county revenues are derived from the county taxes, miscellaneous sources[3] and state aid.[4]

The chief taxes at present imposed by the State government are shown in the following table:

TABLE XXI

SEVENTEEN CLASSES OF TAXES IMPOSED FOR STATE PURPOSES BY THE STATE OF NEW JERSEY

1. Taxes on General Property
   (a) The State school tax—a levy fixed at two and three-fourths mills on the aggregate of the abstract of ratables for the preceding year.
   (b) The soldiers' bonus tax—a levy imposed in amount sufficient to provide interest and sinking fund charges for the soldiers' bonus bonds.
   (c) The State highway tax—a levy imposed at a fixed one mill rate on the basis of the abstract of ratables for the current year.
   (d) The State institutional tax—a levy imposed at a fixed half mill rate on the basis of the abstract of ratables for the current year.
2. Taxes on the main stem, personalty, and franchise values of railway and canal companies. These taxes are levied on the value of the property in question as established by the State Board of Taxes and Assessment at the weighted average tax rate for the State as a whole.
3. Taxes on miscellaneous New Jersey corporations:
   (a) Taxes imposed on certain classes of New Jersey corporations at graduated rates on the basis of shares of capital stock issued and outstanding as reported by the companies.
   (b) Taxes imposed on the reported gross receipts of express and pullman companies at a rate of two per cent.

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[2] Local miscellaneous sources include: State aid for schools and from motor vehicle money, licenses and fees, fines and penalties, franchise and gross receipts taxes, interests and costs, sales of materials and other sources.

[3] County miscellaneous sources include: fines and fees, penalties, board of inmates of institutions, interest, sale of products, revenue from county officers and others.

[4] County State Aid consists of aid for road construction and repairs, and support of institutional inmates.

(c) Taxes imposed on an electric light company on the basis of gross receipts and dividends in excess of four per cent.

4. Inheritance tax. Assessed by the State Comptroller upon the clear value of transfers by inheritance or by gifts in anticipation of death, at rates graduated both upon the amount of the clear value of the transfer and upon the relationship of the beneficiary to the decedent.
5. Tax on admissions to boxing and sparring exhibitions. Paid by the exhibitors at the rate of 10 per cent on paid admissions.
6. Motor vehicle registration tax. Assessed and collected by the Commissioner of Motor Vehicles and by him turned over to the State Treasurer monthly.
7. Tax on sale of motor vehicle fuels. Paid monthly by distributors at the rate of two cents per gallon to the Commissioner of Motor Vehicles, who turns over the collections monthly to the State Treasurer.

8–16. Taxes on different types of insurance companies. The State Department of Banking and Insurance assesses the taxes on insurance companies. The State Board of Taxes and Assessment collects the taxes on New Jersey life insurance companies, which is at the rate of one per cent of the surplus and 35/100 of one per cent of the gross premiums. The Department of Banking and Insurance collects the remaining taxes on insurance companies, except an additional tax on workmen's compensation and employers' liability insurance, which is collected by the Commissioner of Labor at the rate of one per cent of the total compensation paid.

Most of the proceeds of these taxes are available for State purposes. However, the fire insurance taxes are available for any firemen's relief associations throughout the State, and the additional tax collected by the Commissioner of Labor is used for compensation and rehabilitation purposes.

17. Sales tax on commercial fertilizers and feed stuffs. This tax is payable to the agricultural experiment station at the rates of 15 cents per ton on fertilizers and 8 cents per ton on feed stuffs. The proceeds are available for certain purposes of the agricultural experiment station.

The taxes enumerated in Table XXI constitute the chief sources of revenue for State purposes in New Jersey. The sources of revenue for local and county purposes have been indicated. The only tax that is levied by the county directly is the bank stock tax. This tax is levied by the county and is divided equally between the county and the local tax district.

The general property tax is by far the most important tax levied in the State of New Jersey. During the year 1928 the total amount of money raised from this source was $249,898,451.40, which also included the tax on railroads and canals.[5] The railroad tax illustrates an interesting phase of the general property tax. Previous to 1906 the main stem railroads and the canal

[5] State Board of Taxes and Assessment, *Report of 1928*. Compiled from data on pages 6 and 7.

properties were assessed by the local districts and the taxes were collected by them. There was a great deal of complaint by the railroad and canal companies against the local assessment and collection because of the inequalities of assessments. The railroads were anxious to have the State make the assessments and collect the taxes. Finally the local districts agreed to have the State make the assessments and to collect the taxes, providing that the moneys collected should be returned to the local districts for school purposes. Accordingly, the Legislature of 1906 passed an amendment, which is found in Chapter 146, Section 1, Public Laws of 1906.

This amendment provided that "after deducting therefrom a sum equal to one-half of one percentum of the total valuation of the property on which said tax has been or shall be assessed—shall be devoted to the maintenance and support of a thorough and efficient system of free public schools and shall be apportioned annually—in proportion to the amount of taxable property real and personal, of said counties, respectively, as shown by the last abstract of ratables from the several counties."[6]

The apportionments of this tax for school purposes will be discussed later, under the head of revenue for public education. The present interest is the method by which the railroad tax is assessed and collected.

The property of railroads is divided into the following four classes:

First Class—Main Stem and Tangible Personalty. Assessed and collected by the State Board of Taxes and Assessment at the average rate of assessment. The average rate of taxation in 1928 was $\$3.87^{7}/_{10}$

Second Class—Real Estate Outside of Main Stem, Used for Railroad Purposes. Assessed by the State Board of Taxes and Assessment at the local rates prevailing in the districts in which such property is situated.

Third Class—Property Owned by Railroads but not used for Railroad Purposes. Assessed and taxed by the local districts at the local rates.

Fourth Class—The Remaining Property, Including Franchises. Assessed and collected by the State Board of Taxes and Assessment at the average rate of taxation.

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[6] Quoted from the Act cited above.

Of the proceeds of the railroad tax, one-half of one per cent of the assessed valuation is retained by the State Treasurer for general State purposes, part of it is allocated by statute to certain departments of the State government and the remainder is apportioned to the counties for the support of the public schools.

Public utilities in New Jersey that use or occupy the public highways pay a franchise tax that is levied by the State Board of Taxes and Assessment on taxable gross receipts of the corporations. The rate is 5 per cent of the taxable gross receipts and the proceeds are apportioned among the taxing districts by the State Board according to the value of such public utility property in the highways of each district. The taxes are paid direct to the local collectors for local uses.

All street railway, traction, gas and electric light, heat and power corporations pay a gross receipt tax, an annual tax at the average rate of taxation of the State as computed and fixed by the State Board of Taxes and Assessment in accordance with Chapter twenty-five of the Laws of 1919. The proceeds of this tax are apportioned by the State Board among the taxing districts according to the value of the personal property of such companies located in each district, and are paid direct to the local collectors for local uses. Public utility companies are also subject to the general property tax on real and personal property, subject to the same exemptions as individuals.

Miscellaneous corporations pay a tax on the basis of the number of shares of capital stock issued and outstanding, as reported by the companies. The tax is assessed by the State Board of Taxes and Assessment at a graduated rate. The proceeds are paid to the State for State uses. These corporations are also liable to the general property tax on their real and personal property located in the State, at the same rate as individuals.

Shares of the capital stock of national and state banks and trust companies are taxed by the County Boards of Taxation at three-fourths of one per cent. This tax is paid to the County Treasurer. Fifty per cent of the tax goes to the county and fifty per cent to the local taxing district. The real estate of the

bank, which is assessed locally, is deducted in determining the value of the shares, and the tax is in lieu of all other State, county, and local taxation on such shares or on the personal property of such banks.

The motor vehicle tax is assessed and collected by the Commissioner of Motor Vehicles and by him turned over to the State Treasurer monthly. Less such sums as the Legislature may appropriate for the support of the department of motor vehicles and for specific objects in connection with highway work, the balance is to be used by the State Highway Commission for the repair of improved State highways.

The tax on the sale of motor vehicle fuel is paid by the distributors at the rate of two cents (will soon be three cents) per gallon on motor vehicle fuel sold or used during the previous month for propelling motor vehicles and motor boats. It is paid to the Commissioner of Motor Vehicles who turns over the collections once a month to the State Treasurer. After the deduction of amounts appropriated by the Legislature for the administration of the tax and of $90,000 per annum, which is reserved by statute for the uses of the department of commerce and navigation, the balance is allocated to the State Highway Commission for the construction of roads and bridges.

The remaining taxes have been described in Table XXI and will not require any further discussion. This information concerning the taxes of New Jersey has been compiled from several sources,[7] and although some of the descriptions have been somewhat condensed, the full essence of the tax laws has been given.

Three general characteristics of the tax system of New Jersey may be observed in the preceding description. First, the number of different kinds of taxes imposed; second, the number of

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[7] The information concerning taxation in New Jersey was compiled from the following sources:

(a) The Governor's Message to the Legislature, January 29, 1923. Statistical Information Concerning Taxation and Expenditure of Public Funds.

(b) Report on a Survey of the Organization and Administration of the State Government of New Jersey, 1930.

(c) Thirteenth Annual Report of the State Board of Taxes and Assessment of New Jersey, 1928.

(d) State Federated District Boards of Education, Report by Morse and Anderson, 1928.

different officials connected with the assessment and collection of the taxes; and third, the extent to which the different taxes are preempted for certain purposes. This has been well summed up by Cornick in the following quotation: "The State has on its statute books seventeen kinds of taxes, varying from one another in the base on which the tax is levied, the rate at which the tax is imposed, or the purpose for which the proceeds may be used. Seven of the largest revenue producers among them including the registration tax on automobiles, the sales tax on gasoline, the general property taxes, and the tax on gross premiums of foreign fire insurance companies, are definitely earmarked for specific purposes and are not available for general State purposes; four, including the taxes levied against the 'main stem', personality, and franchise values of railway and canal companies, are available only in part for general State purposes; and only six, including that on marine insurance companies, which is negligible as a revenue producer, are available for appropriation by the Legislature without restriction as to purpose. It is worthy of note, furthermore, that six departments of the State government are charged with the duty of assessing and collecting one or more of these seventeen kinds of taxes; and that all of the taxes, with the single exception of the tax imposed against general property for the soldiers' bonus bonds, are levied at fixed rates continued from year to year."[8]

This summation of the tax situation in New Jersey shows the lack of unity in the present system, the absence of a central taxing power, and the extent to which a number of taxes are preempted for certain purposes.

3. *Revenue for Public School Purposes*

In 1928 the revenue for all public school purposes in the State of New Jersey was derived from the sources listed in Table XXII.

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[8] Cornick, Philip H., Section on Taxation and Conservation in the *Report on a Survey of the Organization and Administration of the State Government of New Jersey*, p. 120.

TABLE XXII

SOURCES OF REVENUE FOR PUBLIC SCHOOL PURPOSES IN NEW JERSEY, 1928

1. Local taxes based upon the assessed valuation of general property, including second class railroad property, at a rate determined by the local authorities	$71,292,360.38
2. State taxes based upon a two and three-fourths mills taxation upon the total assessed valuation of general property within the State	15,101,134.17
3. Railroad taxes based upon the assessed valuation of first class railroad properties in the State and railroad franchises, after certain deductions were made[9]	1,475,489.22
4. Income from the State School Fund	500,000.00
5. Income from the Surplus Revenue Fund	27,703.55
6. Bond issues	20,881,046.76
7. Other sources	1,652,268.36
Total revenue[10]	$110,930,002.44[11]

Federal aid for vocational education amounting to $162,388 was included in the item, "Other Sources." Federal aid, income from the State School Fund, and income from the Surplus Revenue Fund amounted to $690,091.55 in 1928.[12] This was practically the only part of the revenue that was not raised by means of the general property tax. Ninety nine and thirty seven per cent of the revenue for public school purposes was raised by means of a tax imposed upon the assessed valuation of general property.

4. *Dissatisfaction With the General Property Tax*

But the general property tax is not satisfactory as a means of producing the major portion of the revenue for public purposes. While it may have been fairly satisfactory under more primitive conditions, the changed economic order has produced a new state of affairs in the matter of taxation. The general property tax has become what is now practically a tax on real estate and the wealth invested in intangibles, such as stocks, bonds, and other evidences of investment, goes untaxed while real estate bears most of the burden.

Seligman condemns the general property tax from the triple

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[9] For detailed deductions see Appendix B.

[10] *New Jersey School Report for 1928*, pp. 229–231.

[11] For convenience the $2.44 were dropped and the sum of $110,930,000 will be referred to as expenditures, for expenditures and revenue balance.

[12] *New Jersey School Report for 1928*, pp. 229–231.

standpoint of history, theory, and practice. His conclusion is, that "The general property tax as actually administered is beyond all doubt, one of the worse taxes known in the civilized world."[13]

More than forty years ago the Maryland Tax Commission pointed out the dissatisfaction caused by this form of taxation. The report says: "Our present system of state and local taxation is unsatisfactory.—Dissatisfaction was soon manifest on account of inequalities in the adjustment of the burdens of taxation, and attempts were made to remedy this. This dissatisfaction has increased without interruption up to the present time, and every year renders our existing methods of assessing property and of taxing it more intolerable."[14]

As recently as 1927 the Pennsylvania Tax Commission cites the evils of the present system as follows: "The evils in the present system of assessment and collection of local taxes are as follows:

"(a) Wide variations in the ratio of assessments to real value, sometimes within the same taxing district.

"(b) Consequent injustices in the burden of county taxes, which are based on the local assessments.

"(c) Multiplicity of tax collectors, most of whom are paid by the commission system, whose income is increased with the increase in local taxes out of proportion to the value of their service.

"(d) Serious inconvenience to the taxpayer, caused by the multiplicity of tax bills and tax collectors and different times and places of payment."[15]

Attempts have been made to rectify conditions in New Jersey by establishing state and county boards of taxes and assessment to supervise the administration of taxation. But these measures fail for they do not reach the underlying causes of inequity. They do not affect the local assessments and the local situation is the root of the dissatisfaction with the property tax.

The most serious criticism against the general property tax is that it is inequitable. It is inequitable in that it taxes only one

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[13] Seligman, E. R. A., *Essays in Taxation, 1913*, p. 62.
[14] Bullock, Charles J., *Selected Readings in Public Finance*, pp. 207–211.
[15] Pennsylvania Tax Commission, *Report of 1927*, p. 22.

form of resources and does not touch other forms that are fully able to bear a portion of the burden. It depends entirely upon property in the form of real estate and does not reach persons, or intangible property. Many persons who own no real estate have resources either in investments in intangibles or in personal services and these contribute no direct tax. Further, it is inequitable in that the differences in assessments between localities place an unfair burden upon some sections of the commonwealth while other sections, because of lower assessments, are more lightly taxed. Table II, page 30 in Chapter II shows that one county assessed its property at 35 per cent of its estimated true value while another county assessed at 60.3 per cent of its estimated true value. Such inequalities in assessment produce grave injustice in the application of the tax.

5. *The Basis of Comparison*

So, as the general property tax is unsatisfactory, the purpose of this part of the study is to call attention to other forms of wealth and to show what the results would be if each of these forms was considered as the basis of taxation for public school purposes.

It will be necessary to have a base with which to make comparisons of the results obtained by considering each of the economic factors, included in this study, as the basis of taxation. For this purpose the expenditure of every county in 1928 was divided by the number of pupils in average daily attendance in order to place the estimates on the basis of the pupil in average daily attendance.[16]

The total State expenditure of $110,930,000 was taken as the entire amount paid for public education in which the counties were directly interested. This amount included the expenditure for all types of academic and vocational schools, for night schools, continuation classes and adult education. It did not include the State University nor the State Normal Schools as the funds

[16] Hereafter the term "per pupil" will be used to indicate "per pupil in average daily attendance."

for their support[17] constitute a prior deduction from the railroad tax fund and so would not come within the scope of this study.

Private and parochial schools care for the educational needs of a considerable number of pupils. While the private schools draw a comparatively small number of pupils from the public schools of the State, the parochial schools have a large proportion. According to the records of the State Department of Education,[18] in 1928 there were in New Jersey 287 private and parochial schools with a total enrolment of 101,684 pupils of compulsory school age, that is, between the ages of 7 and 16 years.

The parochial schools of the Catholic Church, however, reported an enrolment of 124,921 pupils in 1928.[19] Presumably this report includes all pupils enrolled both above and below the compulsory age. This would include all kindergarten pupils as well as students of high schools and of college classes.

The patrons of the above schools are taxpayers and are entitled to public school privileges. Should these taxpayers choose to return their children to the public schools, the move would create a situation that would be very different from the one now existing. For instance, if the State had undertaken to provide for the education of the 101,684 pupils that were recorded by the State Department, at the average rate of expenditure for the State as shown in Table XXIV, an additional expenditure of $17,717,420.16 would have been necessary to meet this situation. But if the second enrolment had been provided for, the additional expenditure would have been $21,766,235.04 Due to economic conditions there may be variations in attendance at the private schools, for in times of prosperity enrolment in the private schools may increase, while in times of depression attendance may increase in the public schools.

But until the whole policy of the State changes, no such additional cost needs to be anticipated, and the assumption is made that the present relationship of the State to private and parochial

[17] For details concerning appropriation of funds from this source see Appendix B.

[18] Secured through the kindness of Mr. Herbert N. Morse, Assistant Commissioner of Education for New Jersey.

[19] *Official Catholic Directory for 1928.*

schools will continue indefinitely. So, expenditure for these schools will not be included in this study.

There is some interchange of pupils between counties on a tuition basis. While this situation exists to some extent in regard to elementary school pupils, it applies more particularly to high school attendance. School districts that do not have the necessary facilities may send their pupils to neighboring districts and pay their tuition. The sending district pays the tuition and the State aids the sending district by an appropriation of $60 for high school pupils. There is no appropriation for elementary school pupils. When both the sending and the receiving districts are in the same county, the interchange would not affect the estimates for the counties, except to provide that tuition is not estimated twice. This has been done by deducting tuition from the item "Other Sources" in Table XXII, page 73.

There is of course some exchange between counties but there is not sufficient to affect the estimates as is indicated by the letter of Assistant Commissioner Charles J. Strahan of the New Jersey State Department of Education, which is included in Appendix E.

This State total includes also the sums expended for Capital Outlay. As this money is usually raised by bond issues that spread the payment over a number of years, depending upon the type of construction,[20] this item is frequently omitted in estimating school costs for a particular year. The payment of bonds and interests is covered in the annual budget under the head of Debt Service. But Capital Outlay in New Jersey is a fairly constant school cost. The expenditure for Capital Outlay for the school years 1923–24 to 1927–28 was $108,885,747.80 which makes a yearly expenditure of $21,777,149.76. The amounts for Capital Outlay for the years 1924–25 to and including 1928–29 are given in Table XXIII below:

TABLE XXIII

YEARLY AMOUNTS SPENT FOR CAPITAL OUTLAY DURING THE SERIES OF YEARS 1924–25 TO AND INCLUDING 1928–29

YEAR	AMOUNT EXPENDED
1924–25	$23,304,852.59
1925–26	22,403,903.36
1926–27	22,186,950.15
1927–28	22,484,443.46
1928–29	23,495,489.32

[20] *New Jersey School Laws for 1928*, Section 99.

This makes a yearly expenditure of $22,775,127.77 for the five-year period 1924–25 to and including 1928–29.[21] It will be seen that Capital Outlay is fairly constant and so it is included in this estimate. Table XXIV, below, shows the expenditure, the average daily attendance, and the per pupil expenditure for every county and the totals for the State in 1928.

TABLE XXIV

COUNTY EXPENDITURE FOR PUBLIC SCHOOL PURPOSES IN 1928, AVERAGE DAILY ATTENDANCE AND EXPENDITURE PER PUPIL

	COUNTY EXPENDITURE FOR PUBLIC SCHOOLS	AVERAGE DAILY ATTENDANCE	EXPENDITURE PER PUPIL
Atlantic	4,106,874.07	19,169	214.24
Bergen	11,259,022.77	62,652	179.71
Burlington	2,101,252.61	16,240	129.39
Camden	6,786,491.85	30,503	171.80
Cape May	1,152,656.26	5,412	212.98
Cumberland	1,445,175.19	12,163	118.81
Essex	25,466,920.70	125,046	203.66
Gloucester	1,745,215.64	13,624	128.10
Hudson	17,046,014.62	96,597	176.46
Hunterdon	756,710.63	5,931	127.58
Mercer	4,491,863.67	27,023	166.22
Middlesex	4,997,448.08	36,143	138.27
Monmouth	3,847,736.58	23,947	160.67
Morris	2,589,998.60	17,337	149.39
Ocean	867,729.46	5,517	157.30
Passaic	7,967,391.99	49,612	160.60
Salem	675,352.52	6,955	97.10
Somerset	1,477,716.68	11,245	131.41
Sussex	797,421.75	5,351	149.02
Union	10,123,032.25	48,303	209.57
Warren	1,227,976.52	8,874	138.38
State	110,930,002.44	636,644	174.24

Read: In 1928 Atlantic County expended $4,106,874.07 and had 19,169 pupils in average daily attendance. The expenditure per pupil was $214.24

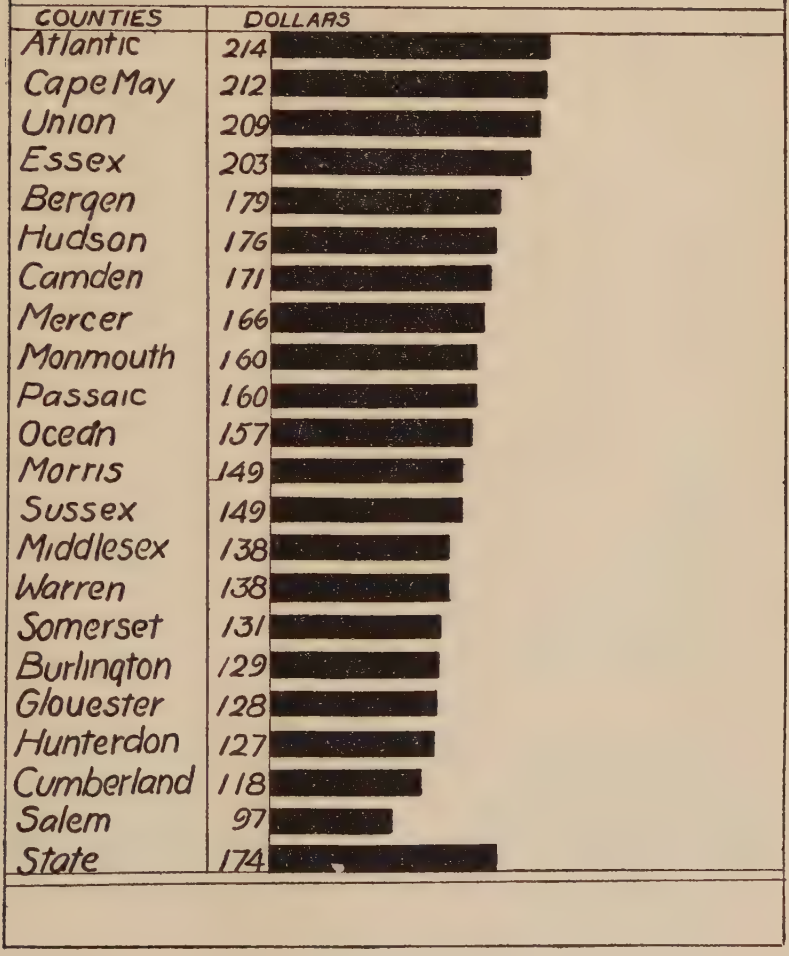
6. *The Economic Factors as Bases of Taxation*

The next step was to test each of the economic factors that were presented earlier in this study, as a basis of taxation. Each

[21] Department of Education, *Annual Report of Educational Business Activities*, prepared by Herbert N. Morse, Assistant Commissioner of Education, 1929, p. 8.

CHART 9

Expenditure per Pupil for Every County in 1928, According to Table XXIV



factor was used as a basis upon which to apportion to every county a share of the total State expenditure for public schools in proportion to the percentage of that factor that the county had. For instance, Atlantic County had 5.81 per cent of the True Value of General Property of the State. So, 5.81 per cent of $110,930,000 or $6,445,033 was apportioned to Atlantic County. As this county had 19,169 pupils in average daily attendance, the above sum would provide $336.22 per pupil.

(a) *True Value of General Property*

A true value of the general property was estimated in Chapter II. It was previously stated that this has become largely a valuation of real estate, for no corrections were made for personalty, and whatever personalty was included did not attempt to reach intangibles. The National Tax Association accepted the principle of taxation of tangibles on the following grounds: "Tangible property, by whomsoever owned, should be taxed by the jurisdiction in which it is located, because it there receives protection and other governmental benefits and services. That the owner is frequently a non-resident is not considered a material fact, because the property must be protected where it is located, and, if employed in trade, comes in competition with similar property of residents. This principle, furthermore, has received the sanction of the Supreme Court of the United States in cases which have developed the rule that tangible property is taxable in the jurisdiction within which it is located, and not elsewhere."[22] The results of using True Value of General Property as a basis for apportioning the total State expenditure for public schools are shown in Table XXV, page 81.

(b) *Income*

New Jersey levies no State income tax. The "Commission to Investigate the Subject of the Distribution of State School Moneys," recommended in its report in 1923 a graduated state income tax of rates varying from one-half of one per cent to three per cent to be levied for the sake of providing additional

[22] National Tax Association, *Report for 1919*, p. 430.

funds for school support, but up to the present writing no law has been passed embodying this recommendation.[23] So a state income tax for public school purposes would not infringe upon resources preempted for other state purposes. The National Tax Association stated the principle upon which this tax is based. It is, "that every person having taxable ability should pay some

TABLE XXV

TOTAL TAXES THAT EVERY COUNTY WOULD HAVE PAID, AVERAGE DAILY ATTENDANCE, AND TAXES PER PUPIL, HAD EXPENDITURE BEEN APPORTIONED ACCORDING TO THE COUNTY'S PERCENTAGE OF STATE TOTAL OF TRUE VALUE

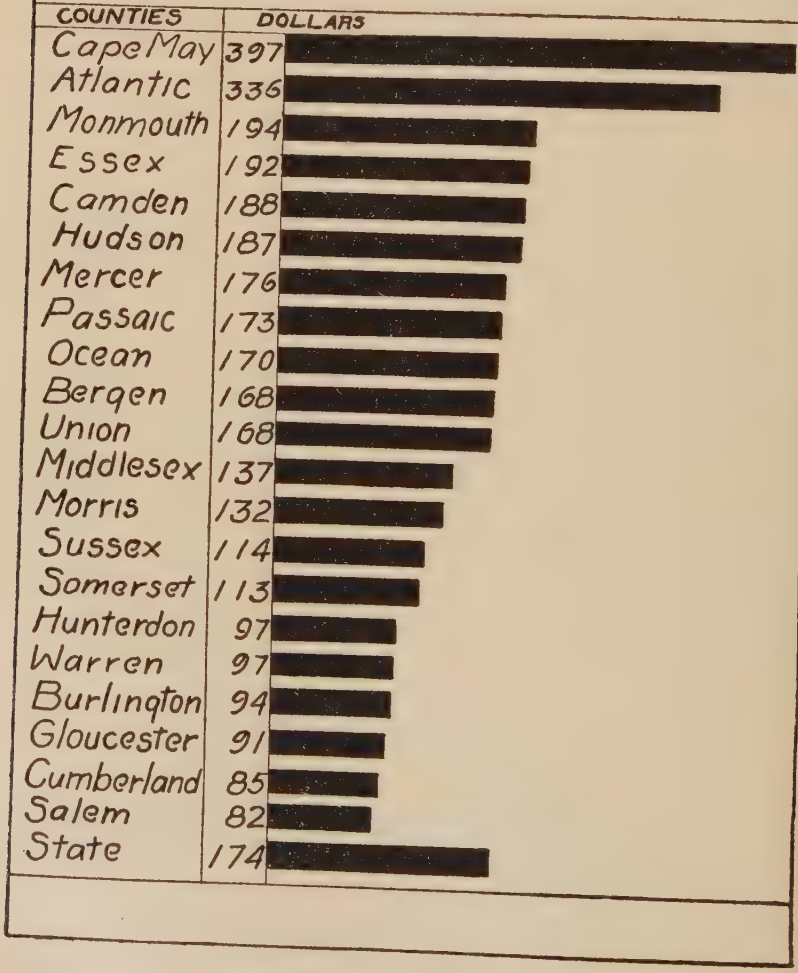
	PERCENTAGE OF STATE TOTAL OF TRUE VALUE	APPORTIONMENT OF TOTAL STATE EXPENDITURE	AVERAGE DAILY ATTENDANCE	TAXES PER PUPIL
Atlantic	5.81	$6,445,033	19,169	$336.22
Bergen	9.50	10,538,350	62,652	168.20
Burlington	1.39	1,541,927	16,240	94.94
Camden	6.70	7,432,310	39,503	188.14
Cape May	1.94	2,152,042	5,412	397.64
Cumberland	.94	1,042,742	12,163	85.73
Essex	21.75	24,127,275	125,046	192.94
Gloucester	1.12	1,242,416	13,624	91.19
Hudson	16.35	18,137,055	96,597	187.76
Hunterdon	.52	576,836	5,931	97.25
Mercer	4.30	4,769,990	27,023	176.51
Middlesex	4.49	4,980,757	36,143	137.80
Monmouth	4.15	4,603,595	23,947	194.67
Morris	2.07	2,296,251	17,337	132.44
Ocean	.85	942,905	5,517	170.90
Passaic	7.77	8,619,261	49,612	173.73
Salem	.52	576,836	6,955	82.93
Somerset	1.15	1,275,695	11,245	113.44
Sussex	.55	610,115	5,351	114.01
Union	7.35	8,153,355	48,303	168.79
Warren	.78	865,254	8,874	97.50
State	100.00	$110,930,000	636,644	$174.24

Read: In 1928 Atlantic County had 5.81 per cent of the total true value of general property in the State, so it would have paid 5.81 per cent of $110,930,000 or $6,445,033. There were 19,169 pupils in average daily attendance, therefore it would have paid $336.22 per pupil.

[23] Swift, Fletcher Harper and Zimmerman, Bruce Lewis, *State School Taxes and School Funds and their Apportionment*, p. 262.

CHART 10

Total Taxes That Every County Would Have Paid per Pupil, Had the Basis of Taxation Been True Value, See Table XXV



sort of a direct personal tax to the government under which he is domiciled and from which he receives the personal benefits that government confers."[24] Table XXVI, page 84, shows the results of using income as a basis for apportioning the total state expenditure to the counties.

(c) *Bank Resources*

Banks, banking associations and trust companies in New Jersey pay a bank stock tax in addition to the tax paid upon real estate owned by the bank. The bank stock tax is levied on the estimated value of the bank stock. It is interesting to note the method of estimating that value. The law provides that, "the value of each share of stock of each bank, banking association or trust company, shall be ascertained and determined by adding together the amount of the capital, surplus, and undivided profits of such bank, banking association or trust company, and deducting therefrom the assessed value of the real property of such bank, banking association or trust company, and by dividing the result by the number of outstanding shares of such bank, banking association or trust company. No deduction or exemption shall be allowed or made from the value determined as herein provided."[25]

The rate of tax upon bank stock is fixed at three-quarters of one per cent upon the value as ascertained in the manner provided.[26] Another provision made for the protection of banks is contained in the following: "The said tax shall be in lieu of all other state, county or local taxation upon such shares or upon any personal property held or owned by banks, banking associations or trust companies, the value of which enters into the taxing value of any such shares of stock."[27]

In 1928 the total resources of banks in New Jersey amounted to $2,745,821,000 and bank stock taxes amounted to $956,183. At the same time general property with an assessed valuation of $6,196,866,000 paid $231,389,853 in taxes. In other words one

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[24] National Tax Association, *Report for 1919*, p. 429.
[25] *New Jersey Tax Laws, 1925*, p. 128, Section 2.
[26] *Ibid.*, p. 129, Section 4.
[27] *Item.*

form of wealth paid only $956,183 in taxes while another form, not quite three times as great, paid about 242 times as much money in taxes. The inequity of the tax burden is apparent in the case of banks.

But the inequity increases as a closer examination is made. The capital stock of banks does not constitute the only source of profit, but all deposits that are made become at once a means of profit-making to these institutions. Gilbert of the University of Oregon points this out: "The banker,—uses his initial capital

TABLE XXVI

TOTAL TAXES THAT EVERY COUNTY WOULD HAVE PAID, AVERAGE DAILY ATTENDANCE, AND TAXES PER PUPIL, HAD EXPENDITURE BEEN APPORTIONED ACCORDING TO THE COUNTY'S PERCENTAGE OF STATE TOTAL INCOME

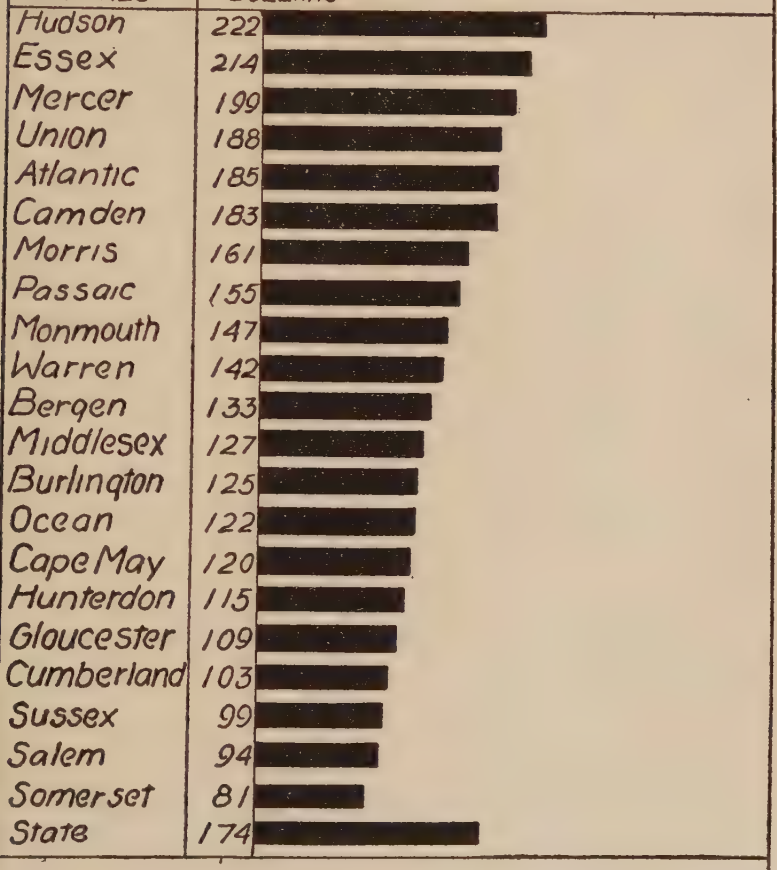
	PERCENTAGE OF STATE TOTAL INCOME	TOTAL STATE EXPENDITURES APPORTIONED	AVERAGE DAILY ATTENDANCE	TAXES PER PUPIL
Atlantic	3.20	3,549,760	19,169	185.18
Bergen	7.52	8,341,936	62,652	133.15
Burlington	1.87	2,074,391	16,240	125.27
Camden	6.55	7,265,915	39,503	183.93
Cape May	.59	654,487	5,412	120.93
Cumberland	1.13	1,253,509	12,163	103.06
Essex	24.23	26,878,339	125,046	214.95
Gloucester	1.34	1,486,462	13,624	109.11
Hudson	19.38	21,498,234	96,597	222.56
Hunterdon	.62	687,766	5,931	115.96
Mercer	4.85	5,380,105	27,023	199.09
Middlesex	4.17	4,625,781	36,143	127.99
Monmouth	3.18	3,527,574	23,947	147.31
Morris	2.53	2,806,529	17,337	161.88
Ocean	.61	676,673	5,517	122.65
Passaic	6.97	7,731,821	49,612	155.85
Salem	.59	654,487	6,955	94.10
Somerset	.83	920,719	11,245	81.88
Sussex	.48	532,464	5,351	99.51
Union	8.22	9,118,446	48,303	188.78
Warren	1.14	1,264,602	8,874	142.51
State	100.00	110,930,000	636,644	174.24

Read: In 1928 Atlantic County had 3.20 per cent of State total income, so it would have paid 3.20 per cent of $110,930,000 or $3,549,760. That would have been at the rate of $185.18 taxes per pupil.

CHART II

Total Taxes That Every County Would Have Paid per Pupil, Had the Basis of Taxation Been Income

See Table XXVI



to set up an establishment which commands confidence, attracts deposits, and supplies a foundation for a vast superstructure of credit which is lent to borrowing customers and yields interest to the lending institution. Through what Horace White has called 'the manufacture of credit' a bank magnifies its lending power. It involves no exaggeration to say that moneyed capital employed in banking operations is eight or ten times as potent as the same capital used in ordinary investment operations. The loans and discount and interest-bearing investments of Oregon banks amount to $268,000,000 while the entire capital, surplus and undivided profits amount to $35,000,000. The paying investments of bankers are thus eight times the invested capital. Failure to recognize this elementary fact regarding the nature of banking has caused many a court decision to be based on the indefensible proposition that equality demands the taxation of individual and banking institutions at the same rate on owned resources in the form of moneyed capital."[28]

The total resources of all banks in New Jersey in 1928 were $2,790,815,158 while the capital surplus and profits were $356,005,450. The resources of the banks were nearly eight times the sum upon which banks pay taxes.

"Financial institutions, well able to share the burden of public functions, are in a legal position to go scot-free and real estate, which already bears 72.6 per cent of the tax load, must assume the added burden as the 'residual heir' in each successive elimination, legal or otherwise, of intangibles from the assessment rolls."[29]

Table XXVII, page 87, shows the results of using bank resources as a basis for apportioning the total state expenditures for public schools.

(d) *Building and Loan Assets*

Building and Loan Associations pay no taxes to the local districts or the State. Their assets during 1928 were reported as

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[28] Gilbert, James H., Address—The General Property Tax as Affected by the Bank Tax Decision in Oregon. Presented at the Twenty-first National Tax Conference, Seattle, Washington, August 27–31, 1928.

[29] *Ibid.*

$1,088,293,000.[30] They are institutions founded for benevolent purposes to some degree, but to a greater degree they are run for profit. They represent reserves over and above the expense of living and there is no valid reason why they should not contribute to the support of public schools. Table XXVIII, page 89, shows the results of using building and loan assets as the basis for apportioning the total State expenditure for public schools.

TABLE XXVII

TOTAL TAXES THAT EVERY COUNTY WOULD HAVE PAID, AVERAGE DAILY ATTENDANCE, AND TAXES PER PUPIL, HAD EXPENDITURE BEEN APPORTIONED ACCORDING TO THE COUNTY'S PERCENTAGE OF STATE TOTAL BANK RESOURCES

	PERCENTAGE OF STATE TOTAL OF BANK RESOURCES	APPORTIONMENT OF STATE TOTAL OF EXPENDITURE	AVERAGE DAILY ATTENDANCE	TAXES PER PUPIL
Atlantic	3.33	3,693,969	19,169	192.71
Bergen	5.17	5,735,081	62,652	91.54
Burlington	1.29	1,430,997	16,240	88.12
Camden	2.46	2,728,878	39,503	69.08
Cape May	.68	754,324	5,412	139.38
Cumberland	.91	1,009,463	12,163	82.99
Essex	26.66	29,573,938	125,046	236.50
Gloucester	.80	887,440	13,624	65.14
Hudson	23.50	26,068,550	96,597	269.87
Hunterdon	.72	798,696	5,931	134.66
Mercer	5.14	5,701,802	27,023	211.00
Middlesex	3.93	4,359,549	36,143	120.62
Monmouth	3.37	3,738,341	23,947	114.35
Morris	2.66	2,950,738	17,337	170.20
Ocean	.70	776,510	5,517	140.75
Passaic	8.74	9,695,282	49,612	195.42
Salem	.55	610,115	6,955	87.72
Somerset	.86	953,998	11,245	84.84
Sussex	.68	754,324	5,351	140.97
Union	6.93	7,687,449	48,303	159.15
Warren	.92	1,020,556	8,874	115.01
State	100.00	110,930,000	636,644	174.24

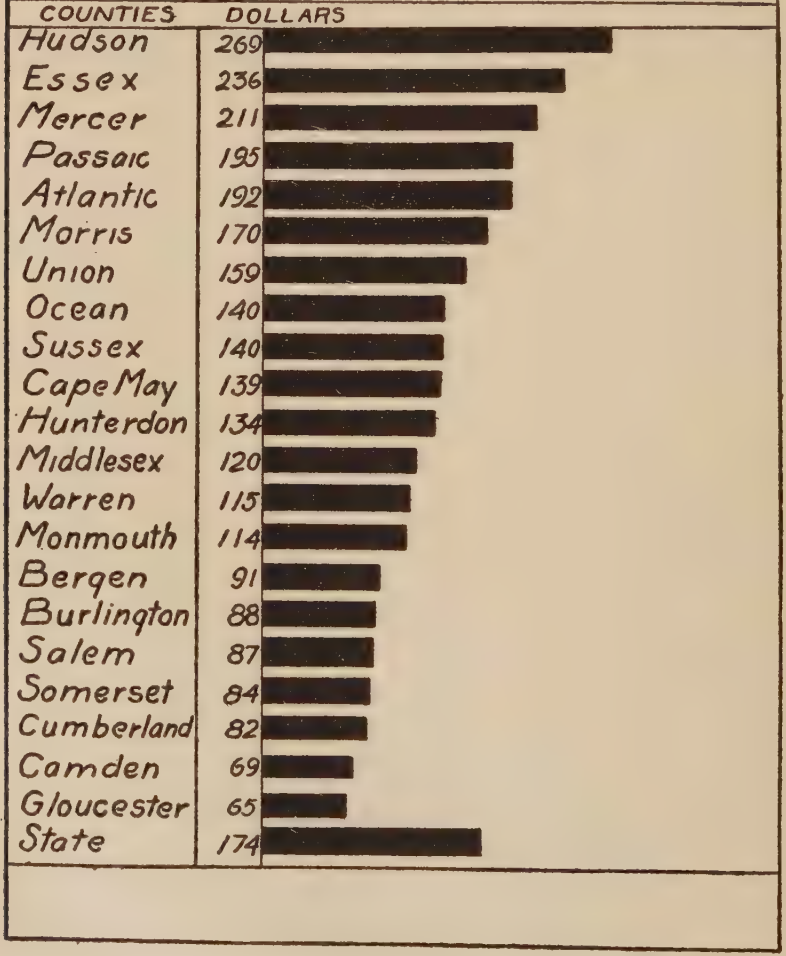
Read: Had expenditure for public school purposes been raised by taxation, apportioned upon bank resources in 1928, Atlantic County would have paid 3.33 per cent of $110,930,000 or $3,693,969. This would have been at the rate of $192.71 per pupil.

[30] Commissioner of Banking and Insurance, *Report Relative to Building and Loan Associations*, December 31, 1928, p. IX.

CHART 12

Total Taxes That Every County Would Have Paid per Pupil, Had the Basis of Taxation Been Bank Resources.

See Table XXVII



(e) *Value of Products*

This factor included the value of products of manufacturing, agriculture, mining and fisheries. The total value of the products of manufacturing might be criticised as a means of taxation, on the grounds of duplication. The product of one industry may become the raw material for another industry. The value added by manufacturing might be a better basis. But the value added by manufacturing would not include the products of

TABLE XXVIII

TOTAL TAXES THAT EVERY COUNTY WOULD HAVE PAID, AVERAGE DAILY ATTENDANCE, AND TAXES PER PUPIL, HAD EXPENDITURE BEEN APPORTIONED ACCORDING TO THE COUNTY'S PERCENTAGE OF STATE BUILDING AND LOAN ASSETS

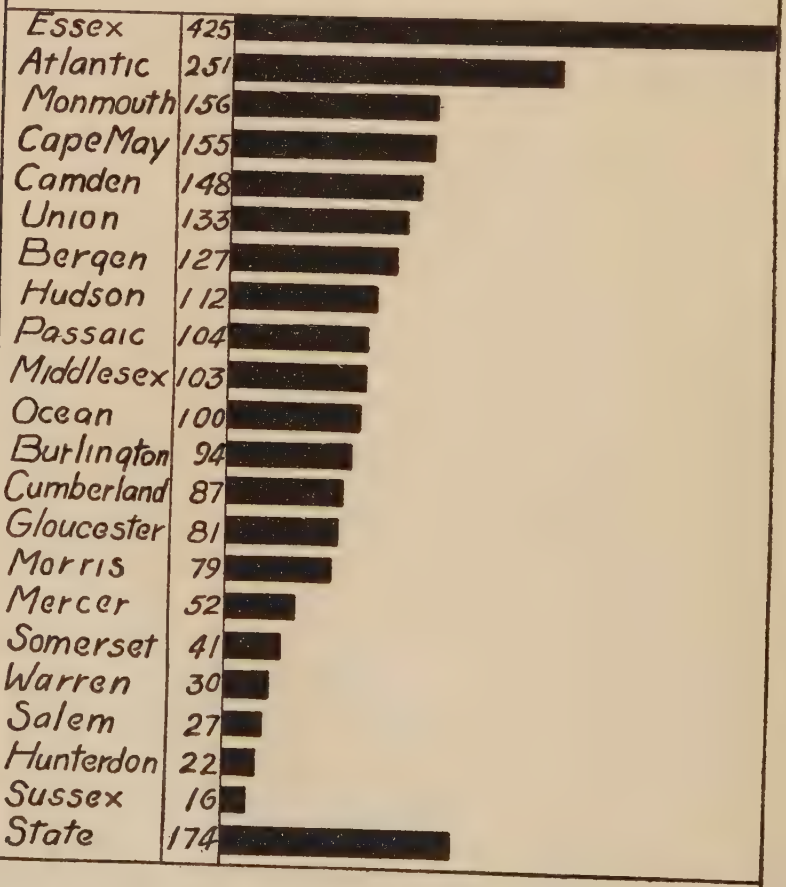
	PERCENTAGE OF STATE TOTAL BUILDING AND LOAN ASSETS	TOTAL STATE EXPENDITURES APPORTIONED	AVERAGE DAILY ATTENDANCE	TAXES PER PUPIL
Atlantic	4.34	4,841,362	19,169	251.15
Bergen	7.22	8,009,146	62,652	127.83
Burlington	1.39	1,541,927	16,240	94.94
Camden	5.29	5,868,197	39,503	148.55
Cape May	.76	843,068	5,412	155.78
Cumberland	.96	1,064,928	12,163	87.55
Essex	47.95	53,190,935	125,046	425.37
Gloucester	1.00	1,109,300	13,624	81.42
Hudson	9.79	10,860,047	96,597	112.43
Hunterdon	.12	133,116	5,931	22.44
Mercer	1.28	1,419,904	27,023	52.54
Middlesex	3.38	3,749,434	36,143	103.74
Monmouth	3.37	3,738,341	23,947	156.11
Morris	1.24	1,375,532	17,337	79.34
Ocean	.50	554,650	5,517	100.53
Passaic	4.68	5,191,524	49,612	104.64
Salem	.17	188,581	6,955	27.11
Somerset	.42	465,906	11,245	41.43
Sussex	.08	88,744	5,351	16.58
Union	5.82	6,456,126	48,303	133.66
Warren	.24	266,232	8,874	30.00
State	100.00	110,930,000	636,644	174.24

Read: In 1928 Atlantic County had 4.34 per cent of State total building and loan assets, so it would have paid 4.34 per cent of $110,930,000 or $4,814,362. That would have been at the rate of $251.15 taxes per pupil.

CHART 13

Total Taxes That Every County Would Have Paid per Pupil, Had the Basis of Taxation Been Building and Loan Assets

See Table XXVIII



agriculture, mining and fisheries and as it seemed desirable to include them in order to present as fully as possible the economic resources of the state, the estimate of total value of products was used here. Further, as this is not an attempt to impose a definite tax or fix a rate of taxation, no injustice will be done. Table XXIX, below, shows the results of using value of products as the basis for apportioning the total State expenditure for public schools.

TABLE XXIX

TOTAL TAXES THAT EVERY COUNTY WOULD HAVE PAID, HAD EXPENDITURE BEEN APPORTIONED ACCORDING TO THE COUNTY'S PERCENTAGE OF STATE TOTAL VALUE OF PRODUCTS, AVERAGE DAILY ATTENDANCE, AND TAXES PER PUPIL

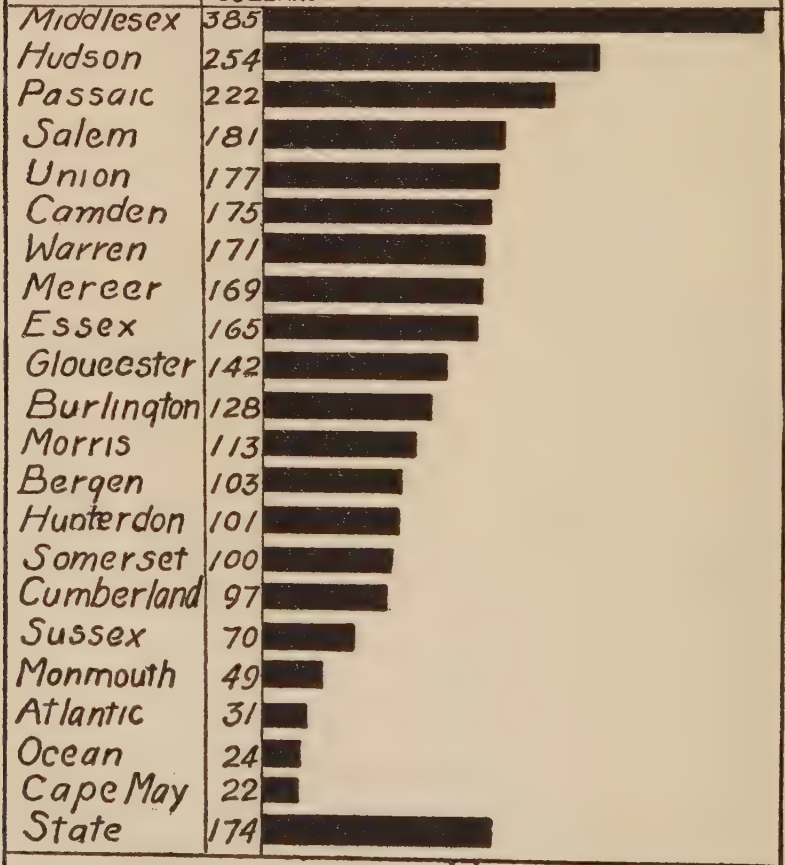
	PERCENTAGE OF STATE TOTAL VALUE OF PRODUCTS	APPORTIONMENT OF STATE TOTAL OF EXPENDITURE	AVERAGE DAILY ATTENDANCE	TAXES PER PUPIL
Atlantic	.54	599,022	19,169	31.24
Bergen	5.82	6,456,126	62,652	103.04
Burlington	1.88	2,085,484	16,240	128.41
Camden	6.26	6,944,218	39,503	175.78
Cape May	.11	122,023	5,412	22.54
Cumberland	1.07	1,186,951	12,163	97.58
Essex	18.66	20,699,538	125,046	165.53
Gloucester	1.75	1,941,275	13,624	142.48
Hudson	22.19	24,615,367	96,597	254.82
Hunterdon	.54	599,022	5,931	100.99
Mercer	4.12	4,570,316	27,023	169.12
Middlesex	12.56	13,932,808	36,143	385.49
Monmouth	1.07	1,186,951	23,947	49.56
Morris	1.78	1,974,554	17,337	113.89
Ocean	.12	133,116	5,517	24.12
Passaic	9.93	11,015,349	49,612	222.12
Salem	1.14	1,264,602	6,955	181.82
Somerset	1.02	1,131,486	11,245	100.62
Sussex	.34	377,162	5,351	70.48
Union	7.73	8,574,889	48,303	177.52
Warren	1.37	1,519,741	8,874	171.25
State	100.00	110,930,000	636,644	174.24

Read: Had expenditure for public school purposes been raised by taxation apportioned upon value of products in 1928, Atlantic County would have paid .54 per cent of $110,930,000 or $599,022. This would have been at the rate of $31.24 per pupil.

CHART 14

Total Taxes That Every County Would Have Paid per Pupil, Had the Basis of Taxation Been Value of Products

See Table XXIX



(f) *Taxes Paid in 1928*

Table XXX, below, is presented at this point for purposes of comparison. It is a repetition of Table XVII, page 58, and shows the total amount of taxes paid by each county for public school purposes in 1928 as well as the amount that every county paid per pupil in average daily attendance. These per pupil items will be compared with similar items for the economic factors that have been discussed previously, in order to determine, if possible, the best basis for taxation.

(g) *Business*

In order to make the comparisons more nearly complete, the per pupil items for every county of bank resources, building and loan assets, and value of products were added together and, to

TABLE XXX

STATE AND DISTRICT TAXES BY COUNTIES. AVERAGE DAILY ATTENDANCE, TAXES PAID PER PUPIL AND STATE TOTALS

	TOTAL OF STATE AND DISTRICT TAXES	AVERAGE DAILY ATTENDANCE	TAXES PAID PER PUPIL
Atlantic	3,443,891.20	19,169	179.66
Bergen	8,037,766.35	62,652	128.29
Burlington	1,515,148.71	16,240	93.29
Camden	4,812,235.36	39,503	121.82
Cape May	818,836.52	5,412	151.30
Cumberland	949,119.94	12,163	78.03
Essex	20,253,992.07	125,046	161.18
Gloucester	1,349,458.70	13,624	99.05
Hudson	14,706,730.33	96,597	141.90
Hunterdon	473,648.69	5,931	79.86
Mercer	3,891,803.59	27,023	144.00
Middlesex	4,160,493.88	36,143	115.11
Monmouth	2,976,515.29	23,947	124.30
Morris	2,155,110.33	17,337	124.30
Ocean	649,937.40	5,517	117.80
Passaic	6,228,734.39	49,612	125.55
Salem	512,632.39	6,955	73.70
Somerset	1,088,188.92	11,245	96.77
Sussex	476,370.37	5,351	89.02
Union	7,144,719.66	48,303	147.91
Warren	718,160.46	8,874	80.93
State	86,363,494.55	636,644	135.65

TABLE XXXI

Comparison of Per Pupil Results

	TOTAL EXPENDITURE	TRUE VALUE	INCOME	BANK RESOURCES	BUILDING AND LOAN ASSETS	VALUE OF PRODUCTS	BUSINESS	TAXES ON ASSESSED VALUES
Atlantic	214.24	336.22	185.18	192.70	251.15	31.25	158.33	179.66
Bergen	179.71	168.20	133.14	91.54	127.83	103.04	107.48	128.29
Burlington	129.39	94.94	125.27	88.11	94.94	128.41	103.83	93.29
Camden	171.80	188.14	183.93	69.18	148.55	175.79	131.14	121.82
Cape May	212.98	397.64	120.93	139.37	155.77	22.54	105.90	151.30
Cumberland	118.81	85.73	103.06	83.00	87.55	97.58	89.38	78.03
Essex	203.66	192.94	214.94	236.50	425.37	165.53	275.80	161.18
Gloucester	128.10	91.19	109.10	65.13	81.42	142.49	96.35	99.05
Hudson	176.46	187.76	222.55	269.87	112.42	254.82	212.37	141.90
Hunterdon	127.58	97.25	115.96	134.66	22.44	101.00	86.03	79.86
Mercer	166.22	176.51	199.09	210.99	52.54	169.12	144.22	144.00
Middlesex	138.27	136.80	127.98	120.62	103.73	385.49	203.28	115.11
Monmouth	160.67	194.68	147.30	114.35	156.10	49.56	106.67	124.30
Morris	149.39	132.44	161.88	170.19	79.34	113.89	121.14	124.30
Ocean	157.30	170.90	122.65	140.75	100.53	24.12	88.47	117.80
Passaic	160.60	173.73	155.84	192.42	104.64	222.03	174.03	125.55
Salem	97.10	82.93	94.10	87.72	27.11	181.82	98.88	73.70
Somerset	131.41	113.44	81.87	84.83	41.43	100.06	75.62	96.77
Sussex	149.02	114.01	99.50	140.97	16.58	70.48	76.01	89.02
Union	209.57	168.79	188.77	159.15	133.66	177.52	156.77	147.91
Warren	138.38	97.53	142.50	115.00	30.00	171.25	105.42	80.93
State	174.24	174.24	174.24	174.24	174.24	174.24		

place them on a comparable basis, the arithmetic average of the items was taken. This series of items was called "business." If the bare sum of the items had been used, it would have been equivalent to giving this series three values. So the average was used.

7. *The Per Pupil Results*

All the per pupil results for expenditure, true value, income, bank resources, building and loan assets, value of products, business, and taxes in 1928 were then gathered into Table XXXI, page 94. This table is used for the purpose of comparison in an effort to discover whether any one of these factors is of sufficient strength to bear the burden of taxation alone.

8. *Comparisons*

A number of comparisons were made in order to determine by statistical procedure whether any one of the economic factors was of sufficient prominence to warrant placing taxation for public school purposes upon that factor alone.

Per pupil expenditure, as shown in Table XXXI was used as the base with which all comparisons were made and similar items for true value, income, bank resources, building and loan assets, value of products, business, and taxes paid in 1928 on assessed valuation were compared with the base.

(A) *Averages, Medians, and Ranges*

The first comparison was between the arithmetical averages, the medians, and the ranges with the results shown in Table XXXII

TABLE XXXII

THE ARITHMETICAL AVERAGES, THE MEDIANS, AND THE RANGES OF EXPENDITURE, AND THE VARIOUS ECONOMIC FACTORS

	AVERAGES	MEDIANS	RANGES
Expenditure	158.13	149.39	97.10 to 214.24
True Value of General Property	161.99	168.20	82.93 to 397.64
Income	144.55	133.14	81.87 to 222.55
Bank Resources	138.43	134.66	65.13 to 269.87
Building and Loan Assets	112.05	100.53	22.44 to 425.37
Value of Products	137.51	128.41	22.54 to 385.49
Business	129.39	106.67	75.62 to 275.80
Taxes in 1928	117.80	121.82	73.70 to 179.66

In the averages and the medians, true value of general property is the only factor that is higher than expenditure although it has a greater range than expenditure. The other factors fall too far below expenditure for any one of them to be considered as adequate to the needs, according to this comparison.

(B) *Standard Deviations*

The standard deviation is a statistical measure that shows the dispersion of a series of items. This measure was computed for every factor with the results that are shown in Table XXXIII, below.

TABLE XXXIII

THE STANDARD DEVIATIONS FOR EXPENDITURE AND THE VARIOUS ECONOMIC FACTORS

Expenditure	32.10
True Value	77.45
Income	40.15
Bank Resources	55.40
Building and Loan Assets	88.91
Value of Products	83.36
Business	50.40
Taxes in 1928	29.13

In this comparison taxes show a lower degree of diversity than any other series, while income is somewhat higher than expenditure. The others run up to a standard deviation of 88.91 for building and loan assets.

(C) *Correlations*

The next step to the standard deviation is correlation. So the coefficients of correlation and the probable errors are shown in Table XXXIV.

TABLE XXXIV

THE COEFFICIENTS OF CORRELATION BETWEEN EXPENDITURE AND THE VARIOUS ECONOMIC FACTORS AND THE PROBABLE ERRORS

	COEFFICIENT OF CORRELATION	PROBABLE ERROR
Expenditure with True Value	.83	±.045
Expenditure with Income	.67	±.08
Expenditure with Bank Resources	.55	±.103
Expenditure with Building and Loan Assets	.69	±.077
Expenditure with Value of Products	−.18	±.14
Expenditure with Business	.51	±.11
Expenditure with Taxes in 1928	.92	±.02

In this comparison taxes show a high degree of correlation with expenditure. But this should be expected as expenditure has depended upon taxes for so many years that a definite relationship has been of necessity established between them. There is also a decided correlation between expenditure and true value. But true value was derived from assessed valuation, so, some degree of correlation was to be expected. Value of products is the only one that shows a negative correlation. A probable low correlation exists in the case of income and of building and loan assets, while it is questionable whether any correlation is shown in the case of bank resources and of business. So in the comparison of ratios of correlation, taxes is the highest, true value next, with building and loan assets and income following in the order named.

(D) *Deviation From the Mean in Standard Units*

The Average Deviation from the Mean in Standard Units was computed for expenditure and for each of the economic factors. This measure reduces all the items of a series of values to such form that they are on a comparable basis with those of another series similarly treated, or the average of the units for a series can be compared with a similar average for any other series.

The Deviation from the Mean in Standard Units of a series of items is computed by subtracting the arithmetic average of the series from each item separately, with due regard to positive and negative signs, and dividing the remainder by the standard deviation for the series. The result is regarded as a standard unit. The arithmetical average of the standard units of the series is the Average Deviation from the Mean in Standard Units. The results of this comparison are found in Table XXXV.

TABLE XXXV

AVERAGE DEVIATION FROM THE MEAN IN STANDARD UNITS FOR EXPENDITURE AND THE VARIOUS ECONOMIC FACTORS

Expenditure	0.82
True Value of General Property	0.72
Income	0.85
Bank Resources	0.83
Building and Loan Assets	0.66
Value of Products	0.76
Business	0.80
Taxes in 1928	0.83

In this comparison bank resources and taxes in 1928 are closest to expenditure, business is next, income is third, value of products is fourth, true value is fifth, and building and loan assets is farthest from expenditure. For the results of calculating these deviations and the averages, see Table XXXVI, page 99.

(E) *Average Ranking on the Basis of Closeness to Expenditure Using Table XXXI*

Using the items in Table XXXI, page 94, the per pupil results, secured by treating the economic factors as the basis of taxation, were ranked as to closeness to expenditure. The record of these rankings is shown in Table XXXVII, page 100. The final average ranking for the several factors was calculated and the results are shown in Table XXXVIII.

TABLE XXXVIII

AVERAGE RANKING OF THE ECONOMIC FACTORS AS TO THEIR CLOSENESS TO EXPENDITURE

Income	2.33
True Value	2.88
Bank Resources	4.19
Taxes in 1928	4.33
Business	4.43
Value of Products	4.52
Building and Loan Assets	5.31

According to these comparisons, income is the closest to expenditure, true value is second, and bank resources, taxes, business, value of products, and building and loan assets follow in the order named.

(F) *Per Cent of Variation*

Once more using Table XXXI the per cent that every factor varied from expenditure was calculated by counties. The positive items were higher and the negative were lower than expenditure. These variations are shown in Table XXXIX, page 101. Then the positive and the negative per cents were averaged. The averages were then tabulated and presented in Table XL, page 103.

TABLE XXXVI

THE ECONOMIC FACTORS MEASURED AS TO DEVIATION FROM THE MEAN IN TERMS OF STANDARD UNITS

	TOTAL EXPENDITURES	TRUE VALUE	INCOME	BANK RESOURCES	BUILDING AND LOAN ASSETS	VALUE OF PRODUCTS	BUSINESS	TAXES ON ASSESSED VALUATION
Atlantic	1.75	2.25	1.01	0.98	1.56	—1.27	0.57	2.12
Bergen	0.67	0.98	−0.28	−0.85	0.18	−0.41	−0.44	0.36
Burlington	−0.90	−0.86	−0.48	−0.91	−0.19	−0.11	−0.51	−0.84
Camden	0.43	0.34	0.98	−1.25	0.41	0.46	0.03	0.14
Cape May	1.71	3.04	−0.59	0.02	0.49	−1.38	−0.47	1.15
Cumberland	−1.23	−0.98	−1.04	−1.00	−0.28	−0.48	−0.79	−1.37
Essex	1.42	0.40	1.76	1.77	3.52	0.34	2.91	1.49
Gloucester	−0.94	−0.91	−0.88	−1.32	−0.34	0.06	−0.66	−0.64
Hudson	0.57	0.33	1.95	2.37	0.00	1.41	1.65	0.83
Hunterdon	−0.95	−0.84	−0.71	−0.07	−1.00	−0.44	−0.86	1.30
Mercer	0.25	0.19	1.36	1.31	−0.67	0.38	0.29	0.90
Middlesex	−0.62	−0.32	−0.41	−0.32	−0.09	2.97	1.47	−0.09
Monmouth	0.08	0.42	0.07	−0.43	0.50	−1.05	−0.45	0.22
Morris	−0.27	−0.38	0.43	0.57	−0.37	−0.28	−0.16	0.22
Ocean	−0.02	0.11	−0.55	0.04	−0.13	−1.36	−0.81	0.00
Passaic	0.08	0.15	0.28	0.98	−0.08	1.01	0.88	0.27
Salem	−1.91	−1.02	−1.26	−0.91	−0.95	0.51	−0.61	−1.51
Somerset	−0.83	−0.63	−1.56	−0.97	−0.79	−0.45	−1.07	−0.72
Sussex	−0.28	−0.62	−1.12	0.05	−1.07	−0.80	−1.06	−0.99
Union	1.61	0.09	1.10	0.37	0.24	0.48	0.54	1.03
Warren	−0.62	−0.83	−0.05	−0.42	−0.92	0.40	−0.48	−1.27
Arithmetical Average	158.13	161.99	144.55	138.43	112.05	137.51	129.39	117.80
Sigma	32.02	77.42	40.07	55.40	88.91	83.36	50.39	29.13
Average of Units	0.82	0.72	0.85	0.83	0.66	0.76	0.80	0.83

TABLE XXXVII

THE DIFFERENT ECONOMIC FACTORS COMPARED WITH TOTAL EXPENDITURE FOR THE STATE AND RANKED AS TO CLOSENESS TO EXPENDITURE

	TRUE VALUE	INCOME	BANK RESOURCES	BUILDING AND LOAN ASSETS	VALUE OF PRODUCTS	BUSINESS	TAXES
Atlantic	6	2	1	4	7	5	3
Bergen	1	2	7	4	6	5	3
Burlington	4.5	2	7	4.5	1	3	6
Camden	1	2	7	4	3	5	6
Cape May	6	4	3	1	7	5	2
Cumberland	5	1	6	4	2	3	7
Essex	1	2	3	7	4	6	5
Gloucester	5	2	7	6	1	4	3
Hudson	1	4	7	5	6	3	2
Hunterdon	4	2	1	7	3	5	6
Mercer	2	5	6	7	1	3	4
Middlesex	1	2	3	5	7	6	4
Monmouth	3	2	5	1	7	6	4
Morris	2	1	5	7	6	4	3
Ocean	1	3	2	5	7	6	4
Passaic	2	1	4	6	7	3	5
Salem	4	2	3	6	7	1	5
Somerset	1	5	4	7	2	6	3
Sussex	2	3	1	7	6	5	4
Union	3	1	4	7	2	5	6
Warren	5	1	2	7	3	4	6
Total Rank	60.5	49	88	111.5	95	93	91
Average Rank	2.88	2.33	4.19	5.31	4.52	4.43	4.33
Standing	2	1	3	7	6	5	4

It may be pointed out that in Table XXXIX only eight items in true value are above expenditure; six items in income, bank resources, and value of products; five in business; two in building and loan assets; and none in taxes. This means that only eight counties had true value higher than expenditure, six counties had higher per pupil values in income, bank resources, and value of products than their per pupil expenditure and so forth.

TABLE XXXIX

AVERAGE PER CENT OF VARIATION OF THE ECONOMIC FACTORS WHEN EXPENDITURE IS USED AS THE BASE

	TRUE VALUE	INCOME	BANK RESOURCES	BUILDING AND LOAN ASSETS	VALUE OF PRODUCTS	BUSINESS	TAXES
Atlantic	.569	−.135	−.100	.172	−.852	−.261	−.161
Bergen	−.064	−.259	−.490	−.288	−.426	−.402	−.286
Burlington	−.266	−.032	−.320	−.266	−.015	−.197	−.280
Camden	.095	.070	−.597	−.135	−.023	−.236	−.291
Cape May	.867	−.432	−.340	−.270	−.894	−.502	−.290
Cumberland	−.278	−.132	−.301	−.262	−.178	−.248	−.343
Essex	−.052	.055	.161	1.088	−.187	.354	−.208
Gloucester	−.288	−.148	−.491	−.364	.112	−.247	−.226
Hudson	.064	.261	.529	−.363	.444	.204	−.196
Hunterdon	−.238	−.091	.055	−.824	−.208	−.325	−.374
Mercer	.062	.198	.270	−.685	.017	−.132	−.132
Middlesex	−.010	−.074	−.127	−.250	1.788	.470	−.167
Monmouth	.211	−.083	−.288	−.028	−.690	−.336	−.227
Morris	−.113	.083	.140	−.469	−.237	−.189	−.168
Ocean	.086	−.220	−.105	−.361	−.084	−.437	−.251
Passaic	.082	−.029	.198	−.348	.382	.083	−.218
Salem	−.146	−.031	−.097	−.720	.873	.020	−.241
Somerset	−.136	−.377	−.354	−.684	−.238	−.424	−.264
Sussex	−.235	−.332	−.054	−.888	−.528	−.490	−.402
Union	−.194	−.099	−.240	−.362	−.153	−.252	−.293
Warren	−.290	.029	−.170	−.783	.237	−.238	−.415

CHART 15

Averages of the Percentages by which the Economic Factors Varied above and below Expenditure

See Table XXXIX

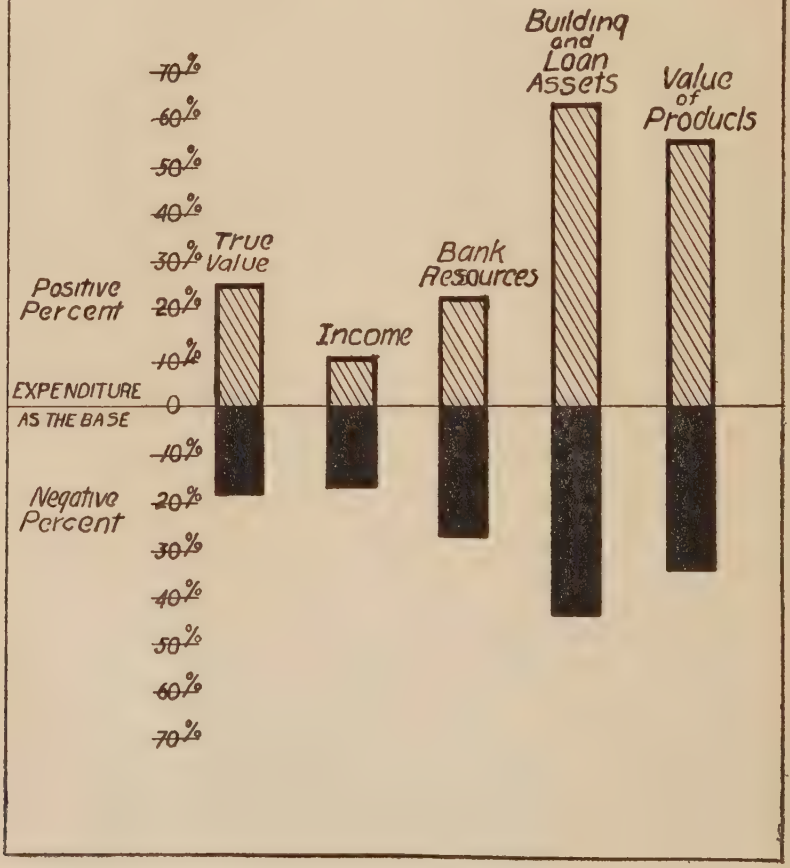


TABLE XL

THE AVERAGE OF THE POSITIVE AND OF THE NEGATIVE PER CENTS BY WHICH THE ECONOMIC FACTORS DIFFERED FROM EXPENDITURE

	AVERAGE OF POSITIVE PER CENTS	AVERAGE OF NEGATIVE PER CENTS
Income	.115	.165
True Value	.255	.173
Bank Resources	.225	.272
Business	.226	.307
Value of Products	.550	.337
Building and Loan Assets	.630	.436
Taxes in 1928	.000	.259

According to the tabulation presented above income ranks first, true value second, and bank resources, business, value of products, and building and loan assets follow in the order named. It is somewhat difficult to classify taxes as all the items are negative, but it should probably be placed after business, and higher than value of products.

9. *Results of Comparisons*

The several economic factors have been successively compared by means of the different statistical procedures that have been employed, In the various comparisons no one of the factors is consistently pre-eminent as a basis for raising the amount of money needed for public school purposes. When the rankings of the factors, as shown by these comparisons, (See Comparisons A, B, C, D, E, F, pages 95 to 98) are compiled, the results are as follows:

TABLE XLI

RESULTS OF THE COMPARISONS MADE BETWEEN EXPENDITURE AND THE SEVERAL ECONOMIC FACTORS BY MEANS OF THE VARIOUS STATISTICAL PROCEDURES EMPLOYED

	COMPARISONS						TOTAL	AVERAGE RANK
	A	B	C	D	E	F		
True Value	1	5	2	6	2	2	18	3
Income	2	2	4	4	1	1	14	2.3
Bank Resources	3	4	5	1.5	3	3	19.5	3.25
Building and Loan Assets	7	7	3	7	7	7	38	6.3
Value of Products	4	6	6	5	6	6	33	5.5
Business	5	3	7	3	5	4	27	4.5
Taxes in 1928	6	1	1	1.5	4	5	18.5	3.1

Read: In comparison A, true value of general property ranked first, in comparison B it ranked fifth and so on to the total of eighteen, which produces an average of three for the six different comparisons. See pages 95 to 98.

The above average of rankings shows that income should be accorded the first place, true value the second, taxes the third, and bank resources, business, value of products, and building and loan assets in the order named. However, none of the factors is of sufficient prominence to warrant using it to the exclusion of the others.

10. *Conclusions*

The results of considering each of the selected economic factor as the base of taxation for public school purposes have just been presented. Some of the factors might be of sufficient economic strength to stand the strain of producing the whole revenue needed for the support of the public schools. Others, however, would not be adequate. This is particularly the case in the consideration of building and loan assets. If the taxes were levied on building and loan assets alone, it would mean that this one factor, which in 1928 amounted to $1,088,283,000 would be required to pay $110,930,000 in taxes. The rate of taxation would be 10.2 per cent of all assets. In view of the fact that the profit of building and loan associations is about 8 per cent annually,[31] such taxation would really be confiscation of all profits and a part of the principal. So it is very evident that taxation of building and loan assets as the only source of revenue for the public schools would be impracticable and unjust.

Similarly, if bank resources were taxed to produce all the revenue needed for the support of the public schools, it would imply that resources that amounted to $2,745,821,000 in 1928 would be required to produce $110,930,000. Such taxation would be at the rate of 4.04 per cent. In view of the fact that not all bank resources are possessions of the banks, but that deposits, which are a considerable portion of the bank's resources, are the possessions of the people who deal with the bank, such taxation would be out of the question. So it would be impracticable and unjust to tax banks alone in order to raise the entire revenue for public school purposes.

It is obvious that to throw the whole burden of taxation upon

[31] See Chapter II, p. 46

a small factor would cause destruction of the very source of the revenue.

It is unjust to impose the whole burden of taxation upon any one factor, even if it is large, for other factors which might well contribute to the support are not called upon to make contributions in proportion to their abilities.

The logical conclusion would be that each of the five economic factors should be available for the support of the public schools or for any other phase of the public service.

IV

The Suggested Plan of Taxation

1. *The Plan*

The results of considering the five economic factors as bases of taxation for the support of the public schools were discussed in the preceding chapter. The conclusion was reached that it would be impracticable and unjust to tax any one of the factors alone for the support of the public schools, but that each of the five factors considered in this study should contribute to this support or to some other phase of public service.

Such taxing would broaden the base of taxation by bringing in other factors of wealth to contribute to the general welfare in proportion to ability. Continuing such a broadening process so as to include all forms of wealth would lead to attaining the ideal tax situation in the State.

Accordingly, as a step in the direction indicated above, the following plan of taxation for public education is suggested:

1. Levy a one-mill tax on the true value of general property, in consideration of the protection and other benefits and services it receives.
2. Impose a personal income tax at the rate of one per cent on all persons of taxing status, in consideration of the benefits that such persons receive.
3. Combine the remaining factors of economic resources that were previously discussed, bank resources, building and loan assets, and value of products, into one class and call it "business". Impose a business tax at the rate of one per cent on the gross business done in the State, in consideration of the protection, benefits, and services that such activities receive.

2. *The General Property Tax*

Although the general property tax has been severely criticised by students of taxation, nevertheless, it continues at the present time in New Jersey to furnish 99.37 per cent of the revenue for

public school purposes as was pointed out on page 73, Chapter III. The public is accustomed to its operation and it would probably be best not to relinquish it entirely. For that reason a light tax for public school purposes is suggested here. The revenue from the general property tax at the rate suggested above would have been, in 1928, $12,262,389. This would have been a decided decrease from the amount of $86,363,494.55, which was collected from that source for school purposes in the above year. (See Table XXX, page 93.)

3. *The Personal Income Tax*

The income tax is a new form of taxation in this country that was adopted by the Federal Government in 1913 and came into prominence during the World War as a means of raising the greatly increased revenues that were needed. It has been established also in nineteen states[1] as a means of increasing the state revenues and to relieve the general property tax. In three states the tax is imposed upon individuals only, and in three other states upon corporations only.[2] In some states the income tax is known as a privilege or excise tax, the object probably being to avoid constitutional difficulties.[3]

As New Jersey does not impose an income tax, this form of taxation, which has been adopted by the states referred to, would not interfere with any other state functions, except that such action would pre-empt one per cent of income for public education. Had New Jersey imposed such a tax in 1928, the revenue from this source would have amounted to $32,465,000.

4. *The Business Tax*

The manufacturing, agricultural, mining, and fishing interests

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[1] The States having an income tax are as follows: Arkansas, California, Connecticut, Delaware, Georgia, Massachusetts, Mississippi, Missouri, Montana, New Hampshire, New York, North Carolina, North Dakota, Oregon, Oklahoma, South Carolina, Tennessee, Virginia, Wisconsin.

[2] California, Connecticut, and Montana impose an income tax upon corporations only. Delaware, New Hampshire, and Oklahoma impose an income tax upon individuals only.

[3] California and Montana refer to corporation taxes; Georgia uses the term—occupation tax—in reference to corporations; Oregon refers to excise taxes; Connecticut refers to stock taxes and to unincorporated business taxes.

of the State pay no direct tax upon the business transacted. They do pay a general property tax upon the real estate and personal property involved. But in view of the greatly decreased general property tax proposed here, there should be but little opposition to expecting them to pay a light business tax on their activities. On the basis of the figures presented earlier in this study, the revenue from the business tax would have amounted to $73,597,570 in 1928. (See Tables IX, XI, XIII) pages 42, 47 and 51.

5. *Revenue from the Above Plan*

If the above plan of taxation had been in effect in 1928, the estimated revenue derived therefrom would have amounted to the following:

TABLE XLII

ESTIMATED REVENUE THAT WOULD HAVE BEEN PRODUCED, HAD THE SUGGESTED PLAN OF TAXATION BEEN IN OPERATION IN 1928

Revenue from the general property tax at the rate of one mill on the dollar of true value	$12,262,389
Revenue from the personal income tax at the rate of one per cent.	32,465,000
Revenue from the business tax at the rate of one per cent of gross business done	73,597,570
Total estimated revenue for public school purposes by the suggested plan	$118,324,959

As the total revenue for the support of the public schools in the State, including the bonds issued during the year, amounted to $110,930,000 in 1928, and during the same year the State expended for State Educational Institutions the sum of $3,284,827[4] and for Teachers' Pension and Annuity Fund the sum of $2,701,055,[5] it will be readily seen that the revenue from the above plan would have been sufficient to place the schools on a "pay-as-you-go" basis, would have provided for the State Educational Institutions and for the Teachers' Pension and Annuity Fund with some funds to spare.

6. *The Estimated Revenue by Counties*

The plan of taxation, that was suggested for public school purposes in New Jersey, was applied to the several counties on the

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[4] Commissioner of Education for New Jersey, *Report of 1928*, p. 229.
[5] *Item.*

assumption that the economic factors presented in Chapter II be used as the basis of taxation and that the rates be those suggested in this plan. The results by counties are shown in Table XLIII, below. The first column of figures shows the results of taxing the true value at the rate of one mill on the dollar, the second column the results of taxing personal income at the rate of one per cent, and the third column the results of taxing business at the rate of one per cent on the total amount of business done.

The whole amount of money, that would have been collected in taxes from these sources, is shown in column one of Table

TABLE XLIII

TAXES ON THE SEVERAL CLASSES IN THE PROPOSED SYSTEM OF TAXATION FOR PUBLIC SCHOOL PURPOSES BY COUNTIES

	TAXES AT THE RATE OF ONE MILL ON TRUE VALUE OF GENERAL PROPERTY	TAXES AT THE RATE OF ONE PER CENT OF TOTAL INCOME	TAXES AT THE RATE OF ONE PER CENT OF BUSINESS[6]
Atlantic	712,876	1,038,880	1,577,680
Bergen	1,165,612	2,441,370	4,258,330
Burlington	170,635	607,100	1,167,620
Camden	820,332	2,126,460	3,458,600
Cape May	237,250	191,540	306,900
Cumberland	116,432	366,850	729,870
Essex	2,666,909	7,866,270	19,117,910
Gloucester	137,725	435,030	944,770
Hudson	2,004,029	6,291,720	15,338,510
Hunterdon	64,182	201,280	400,660
Mercer	527,590	1,574,550	3,006,830
Middlesex	551,012	1,353,790	5,878,640
Monmouth	509,207	1,032,390	1,670,060
Morris	254,232	821,360	1,493,530
Ocean	103,824	198,040	284,830
Passaic	953,407	2,262,810	6,411,990
Salem	63,195	191,550	569,990
Somerset	140,419	269,460	640,360
Sussex	67,847	155,830	316,490
Union	900,572	2,668,620	5,260,270
Warren	95,102	370,100	763,730
State	12,262,389	32,465,000	73,597,570

Read: If the proposed system of taxation had been in operation in 1928 Atlantic County would have paid $712,876 on the true value of general property, $1,038,880 on income, and $1,577,680 on business.

[6] The business tax consists of the combined bank resources, building and loan assets, and value of products.

XLIV, below, where it is compared with the actual taxes paid in 1928 by the tax on general property alone, and with the total expenditures for all public school purposes including the bonds that were issued in that year. It will be observed that Atlantic, Bergen, Cape May, Ocean and Somerset Counties would have paid less by the proposed plan than by the general property tax. Three of these counties, namely, Atlantic, Cape May and Ocean are seashore counties and they are noted for their comparatively high real estate valuations.

TABLE XLIV

TAXES BY THE PROPOSED SYSTEM COMPARED WITH TAXES PAID IN 1927–1928 AND COUNTY EXPENDITURE FOR PUBLIC SCHOOL PURPOSES 1927–1928

	TOTAL TAXES BY THE PROPOSED SYSTEM	TOTAL TAXES PAID FOR PUBLIC SCHOOL PURPOSES 1927–1928	TOTAL EXPENDITURE FOR PUBLIC SCHOOL PURPOSES 1927–1928
Atlantic	3,329,436	3,443,891.20	4,106,874.07
Bergen	7,865,312	8,037,766.35	11,259,022.77
Burlington	1,945,355	1,515,148.71	2,101,252.61
Camden	6,405,392	4,812,235.36	6,786,491.85
Cape May	735,690	818,836.52	1,152,656.26
Cumberland	1,213,152	949,119.94	1,445,175.19
Essex	29,651,089	20,253,992.07	25,466,920.70
Gloucester	1,517,525	1,349,458.70	1,745,215.64
Hudson	23,634,259	14,706,730.33	17,046,014.62
Hunterdon	666,122	473,648.69	756,710.63
Mercer	5,108,970	3,891,803.59	4,491,863.67
Middlesex	7,783,442	4,160,493.88	4,997,448.08
Monmouth	3,211,657	2,976,515.29	3,847,736.58
Morris	2,569,122	2,155,110.33	2,589,998.60
Ocean	586,694	649,937.40	867,729.46
Passaic	9,628,207	6,228,734.39	7,967,391.99
Salem	824,735	512,632.39	675,352.52
Somerset	1,050,239	1,088,188.92	1,477,716.68
Sussex	540,167	476,370.37	797,421.75
Union	8,829,462	7,144,719.66	10,123,032.25
Warren	1,228,932	718,160.46	1,227,976.52
State	118,324,959	86,363,494.55	110,930,002.44

Read: By the proposed system Atlantic County would have raised in 1928 the sum of $3,329,436, compared with $3,443,891.20 raised by the present tax system on general property, and with $4,106,874.07 that was spent for public school purposes.

If, however, the bonds issued in 1928 were removed from the total expenditure and a comparison were made on that basis with the results of taxing by the suggested plan, as shown in Table XLV, below, only five counties would have shown a deficit to the total amount of $636,738.12. The remaining counties would have shown a total excess of $28,912,741.46, while the total excess for the State would have been $28,276,003.34. So the proposed plan would have been more productive than the general property tax, notwithstanding the low rates suggested.

TABLE XLV

TOTAL STATE EXPENDITURE FOR PUBLIC SCHOOLS, LESS COST OF BONDS, COMPARED WITH TOTAL ESTIMATED REVENUE BY THE SUGGESTED PLAN OF TAXATION, SHOWING DEFICIT AND EXCESS BY COUNTIES

	EXPENDITURE, LESS BONDS 1927–1928	ESTIMATED REVENUE BY PROPOSED PLAN 1927–1928	DEFICIT BY COUNTIES	EXCESS BY COUNTIES
Atlantic	2,750,874.07	3,329,436	.....	578,561.93
Bergen	7,739,909.64	7,865,312	.....	125,402.36
Burlington	1,909,252.61	1,945,355	.....	36,102.39
Camden	5,550,741.84	6,405,392	.....	854,650.16
Cape May	882,493.86	735,690	146,803.86	.....
Cumberland	990,175.19	1,213,152	.....	222,976.81
Essex	20,546,751.10	29,651,089	.....	9,104,337.90
Gloucester	1,535,724.31	1,517,525	18,199.31	.....
Hudson	15,125,629.38	23,634,259	.....	8,508,629.62
Hunterdon	637,710.63	666,122	.....	28,411.37
Mercer	3,800,863.67	5,108,970	.....	1,308,106.33
Middlesex	4,497,242.51	7,783,442	.....	3,286,199.49
Monmouth	2,991,492.14	3,211,657	.....	220,164.86
Morris	2,379,069.33	2,569,122	.....	190,052.67
Ocean	754,229.46	586,694	167,535.46	.....
Passaic	6,986,608.64	9,628,207	.....	2,641,598.36
Salem	597,352.52	824,735	.....	227,382.48
Somerset	1,244,966.68	1,050,239	194,727.68	.....
Sussex	649,638.81	540,167	109,471.81	.....
Union	7,658,580.25	8,829,462	.....	1,170,881.75
Warren	819,649.02	1,228,932	.....	409,282.98
State	90,048,955.66	118,324,959	636,738.12	28,912,741.46

Read: In 1927-1928 Atlantic County expended for public school purposes, exclusive of bonds, $2,750,874.07. By the proposed plan it would have produced $3,329,436. Five counties show a deficit totaling $636,738.12, while the State as a whole shows a surplus of $28,276,003.34.

Up to this point the above plan has been discussed from the standpoint of the financial interests of the public schools. It is not, however, the intention to suggest that this plan of taxation should be independent of the tax system of the State, but rather that it should become a part of a new and improved plan of State taxation. For the purposes of this study, the application of the plan as it pertains to the financing of the public schools, is the chief consideration.

Another object of this study is to suggest some of the possibilities in the untouched economic resources of the State and to show, as far as possible, the results that might be attained by taking advantage of the situation. There will be no attempt to justify the economic soundness of this proposed plan, nor any effort to establish the practicability of putting it into effect by legislative action. In the present state of economic affairs in New Jersey it is improbable that any radical changes could be made. But, sooner or later, conditions will compel a revision of the tax system of this State, and this study attempts to point out some of the possibilities for future educational finance.

The intention of this part of the study is to show also that the suggested plan is in accord with the "Model System of State and Local Taxation" as presented by the National Tax Association, that it conforms to the criteria that were cited in Chapter I, and that it is not inconsistent with the established practices of taxation in other states.

A brief outline of the "Model System of State and Local Taxation," as it was formulated by the Committee of the National Tax Association in its report of 1919, will be presented here.

7. *The Model System of State and Local Taxation*

The National Tax Association appointed a committee to prepare a plan for a model system of state and local taxation. At the 1919 Convention of the Association, the committee presented its report. In its report the committee pointed out that it intended to deal only with the general principles upon which a model system of taxation might be constructed and with the general framework of such a system. Not all the details were

fully worked out, and the committee attempted only to provide a foundation upon which future work could be based. The essence of the report is as follows:

"Whatever other purposes taxation may properly have, its fundamental purpose is to provide revenue which, it will be agreed, ought to be raised as equally, certainly, conveniently, and economically as possible.—The committee has confined itself to the one problem of immediate practical importance, which is that of devising methods by which the large revenues now required by American state and local governments may be raised with the greatest practicable degree of equality, certainty, convenience, and economy.

"Any proposed system of state and local taxation must, at the very outset, recognize certain existing conditions and conform to certain practical requirements before it can be seriously considered as a basis for legislation.—They may be stated briefly as follows:

"A. The proposed system must yield the large revenues which our state and local governments require at the present time.

"B. It must be practicable from an administrative standpoint, that is, it must be capable of being administered by such means and agencies as the states have at their command and can reasonably be expected to provide.

"C. It must be adapted to a country with a federal form of government, and to this end must reconcile the diverse claims of our several states, which now conflict at many points thereby producing unjust multiple taxation and disregard of interstate comity.

"D. It must respect existing constitutional limitations, federal and state, or else point to practicable methods of constitutional amendment.

"E. It must represent as nearly as possible a general concensus of opinion, and to this end must give careful consideration to the most influential body of opinion developed and formulated by the National Tax Association.

"F. It must not propose measures wholly foreign to American experience and contrary to the ideas of the American people."

"Study of the tax laws of the American states reveals the fact

that there are three fundamental principles which have been more or less clearly recognized by our lawmakers, and have very largely determined the provisions of the enactments now standing on the statute books.

"The first is the principle that every person having taxable ability should pay some sort of a direct personal tax to the government under which he is domiciled and from which he receives the personal benefits that government confers.—

"The second principle is that tangible property, by whomsoever owned, should be taxed by the jurisdiction in which it is located, because it there receives protection and other governmental benefits and services.—

"The third principle, somewhat less clearly and generally exemplified by our tax laws but discernible none the less, is that business carried on for profit in any locality should be taxed for the benefits it receives."

The committee recommended the adoption of a diversified system of taxation which would recognize fully the three principles mentioned above and would provide a method by which these principles might be logically and consistently applied.

They proposed:

1. "A personal tax which shall be levied consistently upon the principle of taxing every one at his place of domicile for the support of the government under which he lives."

2. "A property tax upon tangible property, levied objectively where such property has its situs and without regard to ownership or personal conditions."

3. "For such states as desire to tax business, a business tax which shall be levied upon all business carried on within the jurisdiction of the authority levying such tax."

"By this method we believe it is possible to satisfy every legitimate claim of every state without imposing unequal and unjust double taxation upon any class of income, property, or business—The personal income tax will reach every kind of taxable income, and will make it unnecessary to attempt to levy any tax upon intangible property, thus eliminating the most serious difficulty connected with property taxation. The property tax will be applicable to every form of tangible property that any state wishes to tax; and admits of being levied upon

such property uniformly, or of being levied under a proper classification—. And finally, the business tax, since it will be levied purely as a business tax and not as a part of a personal income tax or a property tax, can be readily adjusted in such a manner as the needs of business and the situation of every state may require.

"The plan which the committee recommends is, therefore, fundamentally a plan intended to reconcile the conflicting interests of the states, and to facilitate the proper classification of the subjects of taxation. It involves nothing new in principle, and merely requires the logical application of principles already recognized by the tax laws of many states. It will bring about a full and adequate taxation of income, property, and business, and will produce as much revenue as the state and local governments can expect to derive from these sources. Finally, it encounters no insuperable constitutional difficulties, and certainly will require no more changes in state constitutions than any other plan that would be adequate to the needs of the case."[7]

8. *Comparison of the Plan Proposed for New Jersey with the Model Plan of the National Tax Association*

In the Model System of State and Local Taxation (usually referred to as the Model Plan) presented by the committee of the National Tax Association six requirements of an acceptable system of taxation were stated. They will be restated here in an effort to show that the plan suggested for New Jersey meets these requirements.

"A. The proposed system must yield the large revenues which our state and local governments require at the present time."

It was shown on page 108 of this chapter that taxation by the proposed plan would have been sufficient, had the plan been in operation in 1928, to meet all the requirements of the public schools, including Capital Outlay, with a surplus large enough to pay the cost of the State Educational Institutions and the

[7] This résumé was taken from the proceedings of the *Twelfth Annual Conference on Taxation of the National Tax Association*, Chicago, Illinois, June 17–19, 1919. Published 1920, page 426 and following. It is partly paraphrased and partly quoted.

requirements of the Teachers' Pension and Annuity Fund.

"B. It must be practicable from an administrative standpoint, that is, it must be capable of being administered by such means and agencies as the states have at their command and can reasonably be expected to provide."

The State of New Jersey has at the present time adequate facilities, if properly organized, to administer such a tax. All that would be needed would be the additional personnel to care for the necessary details.

"C. It must be adapted to a country with a federal form of government, and to this end must reconcile the diverse claims of our several states, which now conflict at many points thereby producing unjust multiple taxation and disregard of interstate comity."

Nothing has been proposed in the suggested plan that would interfere with the rights of the other states. The personal income tax would be imposed only upon residents of the State, the property tax would affect only the property within the State and the business tax would be imposed only upon the business carried on within the State. So nothing proposed here would affect any other state.

"D. It must respect existing constitutional limitations, federal and state, or else point to practicable methods of constitutional amendment."

The proposed reduction in the general property tax should meet with universal approval and no difficulties are likely to arise on that point. The personal income tax has never been adopted in New Jersey and so there is no legal provision for such taxation. There is nothing in the Constitution of the State of New Jersey to interfere with the establishment of an income tax. The Federal Government found it necessary to pass a constitutional amendment in order to impose an income tax. This was because Section 9 of Article I of the Constitution of the United States says: "No capitation, or other direct, tax shall be laid, unless in proportion to the census, or enumeration hereinbefore directed to be taken."[8] In order to overcome this

[8] Constitution of the United States.

difficulty the Federal Government adopted the Sixteenth Amendment. "The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration."[9]

The only provision for taxation in the Constitution of New Jersey is contained in Article IV, Section VII; "Property shall be assessed for taxes under general laws, and by uniform rules, according to its true value."[10] However, in the same Section is this provision: "The legislature shall provide for the maintenance and support of a thorough and efficient system of free public schools for the instruction of all the children in this State between the ages of five and eighteen years."[11] The "Commission to Investigate the Subject of the Distribution of the State School Moneys,"[12] based their recommendation for an income tax upon the latter constitutional provision. As they, undoubtedly, had the best legal advice for their guidance, no constitutional changes would be involved and only legislative action would be needed, to establish an income tax in New Jersey.

The only legal point that might cause difficulty is in that part of the business tax that proposes to tax national banks. Section 5219 of the United States Revised Statutes constitutes the sole authorization which the several states have in the taxation of national banks. The states can tax such banks only in the manner and degree permitted by that statute. So in this particular, some adjustment may have to be made. But the remainder of this part of the plan should encounter no difficulties beyond that of having the people of the State to desire the necessary legislative enactment.

"E. It must represent as nearly as possible a general consensus of opinion, and to this end must give careful consideration to the most influential body of opinion developed and formulated by the National Tax Association."

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[9] Sixteenth Amendment to the Constitution of the United States.
[10] Constitution of the State of New Jersey, Article IV, Section VII.
[11] *Ibid.*
[12] Committee to Investigate the Subject of the Distribution of the State School Moneys, *Report of 1923*, pp. 7–25.

As the proposed plan is so closely in accord with the Model Plan and is based on the same principles, it surely should receive the approval of the National Tax Association. Further, the federal income taxes have been in use long enough for many of the people of the State to become accustomed to their operation. Other states are successful in imposing income taxes and eventually popular opinion will demand taxation somewhat like that suggested in this study.

"F. It must not propose measures wholly foreign to American experience and contrary to the ideas of the American people."

As the proposed plan suggests nothing that has not been adopted by other states and as all the provisions suggested here have become, to a greater or less extent, a part of the tax system of other states, there is nothing that is foreign to American experience or contrary to the ideas of the American people.

It has been shown that the suggested plan of taxation for New Jersey conforms closely to the requirements of an acceptable tax system, as they were stated by the Committee of the National Tax Association. Furthermore, the proposed plan of taxation depends upon the same basic principles that were set forth in the Model Plan, namely: (a) that every person of taxing ability should pay some sort of direct personal tax to the government under which he is domiciled and from which he receives the personal benefits that government confers, (b) that tangible property should be taxed by the jurisdiction in which it is located, because it there receives protection and other governmental benefits and services, (c) that business carried on for profit in any locality should be taxed for the benefits it receives. So, in the fundamental requirements and principles, the suggested plan of taxation for public school purposes in New Jersey conforms closely with the Model System of State and Local Taxation of the National Tax Association.

9. *Comparison of the Proposed Plan with the Criteria*

In the early part of this study, certain criteria which were presented by the National Education Association, as a basis for judging the efficiency of a state tax system, were set up. Under the caption: "What Is a Good Tax System?" the article says:

"It is easy to say that taxation should be equitable and efficient. But equity and efficiency are nearly as difficult to define as to attain. Still, students of taxation have, over a long period of time, evolved certain general laws or standards of efficiency which constitute a basis for judging a state tax system. Some of these are:

"1. *Adequacy.* The tax system should produce sufficient revenues to meet all the legitimate needs of the State.

"2. *Economy.* Taxes should involve a low percentage of overhead cost for their collection.

"3. *Convenience.* Installments, places, and dates for payment should be arranged to meet the convenience of the public.

"4. *Certainty.* The revenue of a state should be stable and dependable.

"5. *Adaptability.* The tax system should be susceptible of ready modification in time of need.

"6. *Diversity.* Taxes should tap more than one source.

"7. *Conformity.* The tax system should be unified and in accord with the political ideals of the time.

"8. *Conservation.* The tax system should discourage squandering of the patrimony of the State.

"Above all, a sound tax system should be equitable; that is, the burden of paying taxes should be distributed fairly among the people of the state."[13]

Equitability. The plan of taxation proposed for educational purposes in New Jersey does distribute the taxes in an equitable manner. In the first place, it provides for the tax on general property to be levied on the true value of the property, and not upon the assessed valuation as at the present time. This so far as the general property tax is concerned, will place all property on an equitable basis and will insure that all property owners will receive the same treatment.

The personal income tax should be imposed upon all persons of taxable ability in the State, and so will place all persons on the same basis of taxation.

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[13] National Education Association, Research Division, *Studies in State Educational Administration*, Study No. 2, January, 1930, pp. 1 and 2.

The tax on business would be imposed on all types of business now untaxed in the State, at a uniform rate, or provision could be made for such adjustments as may be desirable. Some types of business, such as public utilities and certain kinds of corporations, are now taxed for State revenue. While these would be included in a complete State system of taxation, they are not considered here. In this connection, only those types of commercial activities, that are not directly taxed are regarded as subjects of taxation for public school purposes.

So, this proposed plan of taxation, which takes in the three bases; true value of tangible property, personal income, and business should be more nearly equitable than the present system by which 99.37 per cent of the revenue for public school purposes is derived from the taxation of general property alone.

Adequacy. It has been pointed out earlier in this Chapter that the proposed plan would produce sufficient revenue to provide for the current expenses of the public schools, to pay for Capital Outlay, and leave a surplus that would be sufficient to defray the cost of maintaining the State Normal Schools and other State Educational Institutions, and meet the needs of the Teachers' Pension and Annuity Fund. So, on the point of adequacy, the proposed plan is in advance of the present plan of taxation.

Economy. Almost all the states, that have established an income tax, administer it from a central office. Authorities on taxation agree that a centrally administered system of taxation is more convenient, economic, and efficient than one administered by county or municipal authorities. The National Tax Association recommends that: "The administration of the personal income tax should be placed in the hands of state officials. This we regard as an indispensable condition for the successful operation of any state income tax, and we should be disinclined to recommend the adoption of an income tax by any commonwealth that is unwilling to turn over its administration to a well organized and properly equipped state department, Local administration of an income tax has never worked well. and in our opinion, never can operate satisfactorily."[14] Regard-

[14] National Tax Association, *Report of 1919*, pp. 441 and 442.

ing the business tax, it says: "All the considerations which make it desirable that the personal income tax should be administered by state rather than local officials apply with equal force to a business tax levied upon net income; while there is the further fact that, if the state administers the personal income tax, it can administer the business income tax more conveniently, economically, and efficiently than any county or municipal authorities."[15]

The report of the Pennsylvania Tax Commission finds that, "The cost of local collection is ten times the cost of central collection, or to state it concretely, assuming central collection at the same rate of cost, there would be saved to the people of Pennsylvania over $1,000,000 per year."[16]

The experience of Virginia is similar. The State Tax Commissioner reports that, "the cost of administering the corporation income tax law is about one-half of one per cent. This law is administered exclusively and directly by the State Department of Taxation. The cost of administering the individual income tax law is between five and six per cent, and this law is in part locally administered and in part centrally administered."[17]

These experiences and opinions point to the conclusion that central collection of taxes is more satisfactory and economical than collection by local authorities.

Convenience. This criterion has not been provided for in the proposed plan. It could, however, be taken care of in the legislation that would be necessary. As a central collection is advocated, it could be made more convenient, for in these days of far-reaching mail service and banking facilities, there should be no difficulty in sending the tax payments to the central office.

Certainty. The proposed plan depends upon the most certain elements in the economic life of the State. Real estate is a permanent factor, and income and business are fundamental. So the sources of the proposed revenues are the most dependable and certain that could be selected.

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[15] *Ibid.*, p. 455.
[16] Pennsylvania Tax Commission, *Report of 1927*, p. 20.
[17] Morrissett, C. H., Tax Commissioner of Virginia. In a letter dated October 27, 1930.

Adaptability. As the rates have been estimated very low, they can readily be adjusted to produce more revenue if at any time conditions should warrant such action. And they could be just as easily lowered if economic conditions should demand it.

Diversity. The proposed plan undertakes to tap several sources of revenue. Other sources that are not now taxed and that have not been mentioned in this study could be included in the proper classification. In respect to diversity the suggested plan is preferable to the present system of taxation that depends upon general property to so great an extent.

Conformity. The suggested plan of taxation provides for the following:

(a) A unified system of taxation that includes as many as possible of the sources of revenue that are now untaxed. This is in accord with the opinion of authorities and with the best practice of other states, as has been pointed out in this study.

(b) A more equitable method of taxing general property and a reduced tax on this source. By placing taxation on the true value of general property, all the counties would be placed on the same basis of taxation and there would be no discrimination in favor of any particular county or counties. This would end the present system of taxing general property on the basis of assessed valuations, which is the difficulty of the present time. A lower rate of taxation on general property would relieve that factor of the great burden that it is now bearing. These are crying needs of the present situation.

(c) It proposes only those forms of taxation that have been used successfully in other states and introduces nothing that is foreign to the experience of the American people.

So, on the point of conformity, the suggested plan of taxation is unified and in accord with the ideals of the present time.

Conservation. The principle of conservation means that the tax system should discourage squandering the resources of the state. An example of a tax which is intended to do this is the severance tax. This tax is levied upon the value of the minerals and other products removed from the earth. Since the removal of such materials depletes the natural resources of the state, a good case can be made for taxing those who remove the materials

and who receive the exclusive benefit of their removal.

In the plan of taxation for New Jersey that has been suggested, mining is included in the factor, value of products. As this factor is included in the proposed business tax, a form of severance tax has been provided under the classification of business. However, the severance tax as imposed by other states is usually at the rate of 3 per cent of the value of such products. Should such a rate be placed on mining products, it would provide some means of making adjustments that might be necessary in the business tax.

So, the suggested plan of taxation has included a type of severance tax with a low rate of taxation under the classification of business. In the matter of conservation it meets the requirements.

The above discussion of the criteria shows to what extent the suggested plan of taxation is in accord with the standards that were set up for the purpose of judging a tax system. The suggested plan is in close accord with the criteria and the deduction would be that the suggested plan should be acceptable.

The suggested plan of taxation for public school purposes in New Jersey has been compared with the Model Plan of the National Tax Association and it was shown to be based upon the same principles that were used in the Model Plan, and that it meets quite fully the requirements for an acceptable tax system. It has also been judged by the criteria that were presented by the National Education Association, and is in close accord with those criteria. Further, the estimated revenue from the suggested plan would have been sufficient in 1928 to meet all the requirements of the public schools, including capital outlay, to pay the current costs of the State Educational Institutions, to provide for the Teachers' Pension and Annuity Fund for the above year. So the suggested plan deserves at least the careful consideration of students of taxation.

10. *Administration of the Tax System*

No plan of taxation can succeed, no matter how well drawn, unless there is an adequate administration provided for it. A plan for the central administration of the tax system of New

Jersey has been recommended by the National Institute of Public Administration, and their recommendations will be presented here as probably the best that can be suggested after provisions have been made for a possible income tax and business tax. The recommendation is that;

"The tax functions of the State which are now scattered through six departments, should be consolidated into one department of taxation, under a full-time qualified head, to be appointed by the Governor and to serve at his pleasure."

Within this department several bureaus should be established as follows:

"A bureau of railway taxes would combine with the present functions of the chief engineer in the valuation of railway properties, the duties of the present chief clerk in calculating the average tax rate, extending the rolls; and certifying the taxes for collection.

"A bureau of corporation taxes would handle the present capital stock tax, the apportionment of the municipal franchise and gross receipts taxes,[18] and the certification for collection of the taxes on insurance companies which would be assessed in the department of banking and insurance.

"A bureau of inheritance taxes would take over the functions exercised by the bureau of the same name which is now in the Comptroller's office.

"A bureau of motor vehicles would take over the registration of motor vehicles and drivers and the assessment of the gasoline tax, now functions of the department of motor vehicles; and also the duty of registering motor boats and operators which is now vested in the department of commerce and navigation.

"A bureau of equalization would carry on the present work of the State board of taxes and assessment in the compilation of the State abstract of ratables, in the study of assessment ratios, in the preparation of tentative State equalization tables, and in the preparation of the material essential for the review of assessments on appeal.

"A State board of equalization and review would be created

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[18] Table XXI, Section 3, Articles B and C.

and attached to the department to discharge the quasi-judicial functions of review on appeal, and of approving the final State equalization table after due notice and public hearing."[19]

If an income tax and a business tax were established in accord with the suggestions of this study, a bureau of income and business taxes could be established and included in the above department, and could be organized in such a way that it could levy and collect these taxes from the central office.

Such a central organization could provide for every phase of the tax situation and could establish a central department by which all taxes might be assessed, levied, and collected. It could place a more direct responsibility and could centralize control of all the factors of taxation. And finally, the cost of operating a central tax system is lower than the old system of local tax collection, as was shown above. (See pages 120-121.)

11. *General Conclusions*

This study has pointed out (Chapter I, pages 14 and 15, and Chapter III, pages 73-75) the dissatisfaction that exists in regard to the present tax system of New Jersey because of its inadequacy and of its dependence to so great an extent upon the assessed valuation of general property for the support of public education.

In Chapter II the wealth of the State was approximated by means of selected economic factors and wealth, as indicated by these factors, was compared with duty, as expressed by the number of pupils in average daily attendance, and effort, as expressed by direct taxes paid for public school support.

Evidence was produced in Chapter II to show that:

1. On the basis of true value alone, the counties could maintain the present standard of public education by the use of a comparatively low tax rate. (See Chapter II, page 64.)
2. If the other economic factors were scientifically utilized in taxation there would be abundant resources in the State of New

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[19] Cornick, Philip H., Chapter on Tax Administration in the *Report on a Survey of the Organization and Administration of the State Government of New Jersey*, MacCrellish and Quigley, Printers, Trenton, New Jersey, 1930.

Jersey to support public education without overburdening anyone. (See page 64.)

3. The counties, with four exceptions, are relatively effective in providing their proportionate contribution of total funds needed for public education. (See page 65.)

The present tax system of New Jersey has been carefully analyzed in Chapter III and the sources of revenue for the support of public education have been indicated. Five economic factors, that were selected as measures of wealth, were used severally as the basis of taxation to produce the amount of revenue required to support public education in the year 1928.

The conclusions reached in Chapter III (See pages 104 and 105) are:

1. To throw the whole burden of taxation upon a small factor would cause destruction of the very source of the revenue.

2. It is unjust to impose the whole burden of taxation upon any one factor, even if it is large, for other factors which might well contribute to the support are not called upon to make contributions in proportion to their abilities.

3. Each of the five economic factors should be available for the support of the public schools or for any other phase of the public service.

A plan of taxation for the support of the public school system in New Jersey was suggested (See Chapter IV, page 106). It was shown that the estimated revenue that would have been produced by taxation according to this plan would have been sufficient to meet all the requirements of the public schools, including Capital Outlay, to pay the current costs of the State Educational Institutions, and to provide for the Teachers' Pension and Annuity Fund in 1928. (See Chapter IV, page 108.)

The suggested plan of taxation was also compared with the Model Plan of the National Tax Association and it was shown to be based upon the same principles that were used in the Model Plan, and that it meets quite fully the requirements of an acceptable tax system. (See Chapter IV, pages 115 to 118.)

The suggested plan was then compared with the criteria that were presented by the National Education Association as stand-

ards by which to judge the efficiency of a state tax system. It was found to be in close accord with those criteria. (See Chapter IV, pages 118 to 123.)

So the suggested plan may be deemed, adequate and efficient. It is in accord with the opinion of authorities and conforms to prevailing practice.

APPENDIX A

Definition of Attendance

Only the attendance of the pupils who reside in the State, and who are of legal age, is to be recorded in this Register. Legal ages: Kindergarten, between 4 and 7 years; day school, over 5 years; evening school, over 12 years.

Mark attendance in the column under the date the school is in session.

Mark forenoon and afternoon attendance each in its respective column.

Attendance must be recorded in the register at every session of school, while the pupils are assembled.

No pupil shall be marked present who is not actually present.

No attendance shall be recorded in the Register when the school is not in session.

The mere presence of a pupil at roll call will not be considered as sufficient attendance to be a compliance with the law. A pupil must be present at least one hour during any forenoon, afternoon or evening session in order to be recorded as present one-half day. This applies to the occasional individual pupil and to classes.

For the purpose of apportionment, a day shall consist of not less than four hours of actual school work, except that in kindergartens one continuous session of two and one-half hours may be considered a day. Evening school sessions shall be reckoned as half-days.

A half-day class, to receive credit for one day's attendance must be in session for four hours, exclusive of recess.

A pupil is absent when not in attendance at a session of school while a member of the school. A pupil is either absent or present every day the school is in session after entering school until the date the pupil officially leaves the school for the school year.

An official leaving of school, as far as the Register is concerned, shall be construed to mean: (a) change of domiciliary residence to another district; (b) enrollment in another school during absence from the district when officially reported. Pupils are either present or absent under all other conditions including illness, quarantine, suspension, or other prolonged absence, when not officially reported as enrolled elsewhere.

Average Daily Attendance

Average daily attendance is found by dividing the total days present by the actual number of days school has been kept open.

APPENDIX B

Distribution of Main Stem Railroad Tax Money for 1927-1928

One-half of one per cent retained by the State	$1,326,849.32
State Road Fund	265,369.86
Soldiers' Bonus Fund	51,771.31
State Highway Extension Fund	106,245.69
State Institution Construction Fund	132,684.93
Agricultural College	1,163,589.00
Commissioner of Education	165,495.00
County Superintendents	105,000.00
Evening Schools for Foreign Born	52,915.00
Industrial Education	634,925.00
Man. Tr. and Ind. School—Colored Youth	160,570.71
New Jersey School for the Deaf	252,519.00
State Board of Education	4,000.00
State Board of Examiners	10,680.00
State Normal Schools	838,660.77
Summer Courses in Agriculture	28,800.00
Teachers' Institutes	4,550.00
Teachers' Libraries	400.00
Teachers' Retirement Fund and P. and A. Fund	2,700,755.00
Vocational Schools	270,987.23
Apportionment to the Counties	1,374,994.67
Total Amount of Railroad Tax Apportioned	$9,651,753.49[1]

[1] *State Federation of District Boards of Education*, Report by Herbert N. Morse and Charles D. Anderson, Trenton, 1928, p. 91.

APPENDIX C

Other Sources of Revenue

In addition to the factors that have been discussed thus far in this study, there are other sources from which tax revenue might well be expected. Some of them are in use in other states and are accepted as sources of taxation. This refers for example to the sales and luxury taxes and to the severance tax. These sources have not been discussed earlier for there is no information available concerning them by counties but only for the State as a whole. So these sources are taken up at this point.

Sales and Luxury Tax

Some states levy a sales tax on certain commodities. These commodities may be classed as amusements and luxuries. Although gasoline cannot be properly classed as a luxury, yet it is the most frequently used of the sales taxes. Within recent years every state has imposed a gasoline tax ranging from 2 to 6 cents per gallon. The gasoline tax in New Jersey is, however, pre-empted for the maintenance of highways and so has no place in this discussion except as an example of a sales tax.[1] But there is no special sales tax on luxuries in New Jersey. The sale of articles usually considered in this class in New Jersey was estimated for 1928 as follows:

Tobacco	$70,446,138
Soft drinks, ice cream candy and chewing gum	60,872,896
Theaters, movies and similar amusements	35,623,791
Jewelry, perfume, and cosmetics	27,232,646
Sporting goods, toys and similar articles	16,438,814
Estimated total expenditures for luxuries	$210,614,285[2]

The usual rate of taxation upon these articles by the States that impose such a tax, is ten per cent. If New Jersey had had such a tax in 1928, the revenue from this source would have been $21,061,428.

Severance Tax

A number of states impose a severance tax upon natural products severed from the soil. In some states, such as Louisiana, the tax is levied upon all such natural products other than agriculture. In other states the tax is levied upon certain products such as ores, oil, and minerals of different kinds. The theory of this tax is that when such natural products are taken from the soil,

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[1] National Automobile Chamber of Commerce. *Facts and Figures of the Automobile Industry*, 1929, Edition, p. 83.

[2] National Education Association, *Research Bulletin*, Vol. VII, No. 4, September, 1930. *Investing in Public Education, p. 181.*

the state is thereby permanently impoverished and the persons who profit by this exploitation should pay for the privilege.

The products that are most frequently taxed are coal, iron, ore, oil, and timber. The chief mineral products of New Jersey, in the order of value, are clay products, zinc, cement and stone.[3] The mineral products of the State for 1927 amounted to the total of $73,064,418.[4] Alabama levies a severance tax of 3 per cent of the net value at the mine, quarry or pit of all such minerals as sand and gravel.[5] Such a three per cent tax in New Jersey would have produced, in 1927, the sum of $2,191,932.54.

However, the luxury tax and the severance tax would properly come under the head of the business tax. So they could be imposed under that head but under a separate classification at a higher rate of taxation and would increase the revenue from the business tax accordingly. If such luxury and severance taxes had been imposed in 1928 in New Jersey at the rates suggested above, they would have increased the revenue of the State for public school purposes by the sum of $20,416,574. Or, if desirable, this increase of revenue could be used to effect the adjustments that might be advisable in the application of the business tax.

Motor Bus and Freight Traffic

There is another source of future taxation that the educational authorities of the State should watch carefully in order to secure at least a portion of the prospective revenue for the public schools. Motor bus and freight transportation has come into formidable competition with the railroads. A large share of the State revenue for public education has come from the railroad tax. So public education is directly interested in this matter. The railroads must maintain private roadbeds and expensive equipment and are regulated and taxed. Motor bus and freight transportation uses the highways that were built and paid for by the public, they are free of regulation, may charge what the traffic will bear, and pay no taxes except the registration license and the gasoline tax. As the motor traffic increases the railroads are likely to lose revenue and the railroad taxes must decrease. So it is fitting that the motor traffic should be expected to meet some of the deficit.

However, the situation is complicated by the interstate character of the traffic, so federal legislation is necessary in order to regulate and tax these activities. No information is available regarding the financial condition of this traffic, so no estimate can be made at this time of the probable revenue from

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[3] Department of Commerce, Bureau of Mines, *Mineral Resources of the United States in 1928*, p. A8.

[4] *Ibid.*, p. A7.

[5] Swift, Fletcher Harper and Zimmerman, Bruce Lewis, *State School Taxes and School Funds and Their Apportionment*, p. 12.

this source. But it is a factor that should be considered in the future. For that reason it is called to attention here.

Some Resources in Other States

Some of the states derive income from special sales taxes. Arkansas, Louisiana, Michigan, and Tennessee levy a sales tax on malt syrup or malt. South Carolina levies a tax on certain theater admissions, and Michigan levies a tax on prize fight tickets. Such taxes would come under the classification of sales and luxury taxes or are in use, as was shown in Table XXI, page 67.

The states that received large grants of land for school purposes when they were admitted into the Union or that now contain Federal lands that are rich in mineral or oil, derive considerable revenue from that source. But as New Jersey was one of the original thirteen states, it did not have this advantage except for the consideration received under the Morrill Act, which benefitted the State University of New Jersey. So these forms of revenue do not exist for New Jersey. The mineral resources of the State could be taxed under a severance tax.

Texas assesses fees on certain state controlled water and deposits them in the general state fund, a part of which goes to the public schools. Should the states of New Jersey, New York, and Pennsylvania join in developing the upper Delaware as a source of water supply for the nearby cities, there might be possible sources of income from the leasing of the State lands that are now held or that would have to be acquired. This may be a possible source of revenue for future development.

APPENDIX D

Rates of State Income Taxes

Personal Income

Delaware—1 per cent on first $3,000 of net income above exemption. 2 per cent on next $7,000. 3 per cent on balance.

Massachusetts—Massachusetts incomplete income tax does not fit into this schedule.

Mississippi—1 per cent on first $1,000 net income above exemption. 1½ per cent on second $1,000. 2 per cent on next $3,000. 3 per cent on next $5,000. 4 per cent on next $1,500. 5 per cent on balance.

Missouri—1 per cent.

New Hampshire—"The rate used is the average rate of taxation existing upon other property throughout the state excepting the polls, savings bank deposits and property specially taxed for the year in which the income is assessed."

New York—1 per cent on first $10,000 of net income less exemptions. 2 per cent in amounts above $10,000 and not over $50,000. 3 per cent on amounts over $50,000. Reductions of 25 per cent allowed 1923, 1924, 1925 and for any returns due in 1926.

North Carolina—1½ per cent on first $2,500 above exemptions. 2 per cent on next $2,500. 2¾ per cent on next $2,500. 3½ per cent on next $2,500. 4½ per cent on next $5,000. 5 per cent on excess over $15,000.

North Dakota—1 per cent on first $2,000 above exemptions. 2 per cent on next $2,000. 3 per cent on next $3,000. 4 per cent on next $2,000. 5 per cent on next $2,000. 6 per cent on excess of $10,000.

Oklahoma—7½ mills to the dollar on first $10,000. 15 mills to the dollar on next $15,000. 20 mills to the dollar on the balance.

South Carolina—1 per cent on net income over exemptions and under $2,500. 1½ per cent on net income between $2,500 and $5,000. 2½ per cent on net income between $5,000 and $7,500. 3½ per cent on net income between $7,500 and $10,000. 4½ per cent on net income between $10,000 and $15,000. 5 per cent on net income over $15,000.

Virginia—1½ per cent on first $3,000 of net income. 2½ per cent on next $2,000. 3 per cent on net income over $5,000.

Wisconsin—Normal—1 per cent on first $1,000. 1¼ per cent on second $1,000. 1½ per cent on third $1,000. 1¾ per cent on fourth $1,000. 2 per cent on fifth $1,000. 2½ per cent on sixth $1,000. 3 per cent on seventh $1,000. 3½ per cent on eighth $1,000. 4 per cent on ninth $1,000. 4½ per cent on tenth $1,000. 5 per cent on eleventh $1,000. 5½ per cent on twelfth $1,000. 6 per cent on excess over $12,000.

Corporation Income

Connecticut—2 per cent.

Delaware—2½ mills on each dollar of capital.

Massachusetts—$5.00 for $1,000 on the value of its corporate excess; 2½ per cent of that part of net income covered in last Federal return which is derived from business carried on within the state. Plus income from securities not taxable under Federal law and by adding back any net losses deducted for previous years' losses. Minimum tax one-twentieth of 1 per cent of fair cash value of capital stock.

Mississippi—1 per cent on first $1,000 of taxable income. 1½ per cent on second $1,000 of taxable income. 2 per cent on next $3,000 of taxable income. 3 per cent on next $5,000 of taxable income. 4 per cent on next $15,000 taxable income. 5 per cent on income over $25,000.

Missouri—1 per cent.

Montana—1 per cent.

New York—Whichever of the following amounts is greatest: (a) 4½ per cent on entire net income or (b) 1 mill on every dollar of par stock issued or (c) a minimum of $10,000.

Whichever of the following amounts is greatest: (a) 4½ per cent on part of income represented by portion of its assets segregated to State. (b) 1 mill of every dollar of apportionment of face value of issued stock allocated to the State or (c) minimum tax of $10,000.

North Carolina—4½ per cent on entire net income. 4½ per cent on portion of net income.

North Dakota—3 per cent on entire net income from North Dakota sources.

South Carolina—4 per cent on entire net income but income from business outside the state is deductible.

Virginia—3 per cent on net income attributable to business done and property owned within the State.

Wisconsin—2 per cent on first $1,000. 2½ per cent on second $1,000. 3 per cent on third $1,000. 3½ per cent on fourth $1,000. 4 per cent on fifth $1,000. 5 per cent on sixth $1,000. 6 per cent on seventh $1,000. 6 per cent on balance in addition surtax one-sixth above rates on income over $3,000.

APPENDIX E

STATE OF NEW JERSEY

DEPARTMENT OF PUBLIC INSTRUCTION

TRENTON

May 22, 1930.

Mr. Simon M. Horstick,
Pleasantville, N. J.

MY DEAR MR. HORSTICK:

You have asked about the number of pupils going into the high schools of other counties and the effect of such attendance upon determining education costs on a county basis.

Since County Superintendents approve transportation routes to high school most of these routes are to high schools of the county in which the pupils live. There are, of course, some exceptions where pupils live along the border line and the high school is especially convenient of access, but taking the State as a whole the percentage of pupils attending schools outside the county is very small.

The effect on the financial accounting is still less important. High schools may charge the actual cost of education in the district and since we now are working under the $60.00 apportionment for each pupil attending high school in another district, there has been a general increase in tuition cost to approach the actual cost of education in the district. Of course, the apportionment by a County Superintendent for high school education is made to the districts in that particular county and these districts pay out the money for the tuition the same as if the school was in the particular county. The cost of education in any district whether it sends the pupils outside the county or inside the county is practically the same.

We cannot see that the result of the school accounting could be affected by the pupils going out of the county because, as I pointed out, the cost to the individual district and the apportionment by the County Superintendent are not affected, the number of pupils is small, and the interchange between counties would probably be about equal.

Very truly yours,

C. J. STRAHAN.

Assistant Commissioner of Education.

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